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Freddie A. Roberts

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
rate and temperature, expected HCl removal efficiency, and proposed waste feed cut-off limits.				
D-5c(2) Sampling, monitoring, and analysis information from trial or operational burns of the existing incinerator, including that used to determine performance standards, must be submitted.	122.25(b)(5)(iii)(E)(1)	Ref. 44; Ref. 33		
D-5c(3) The methods of monitoring temperatures, waste feed rates, combustion gas velocity, and CO, including statement concerning the precision and accuracy of these measurements.	122.25(b)(5)(iii)(E)(2)	Ref. 44, Ref. 33		
D-5c(4) A copy of the certified trial burn data submitted to the Director for the existing incinerator.	122.25(b)(5)(iii)(E)(3) 122.27(b)(5)(ii)	Ref. 59		
PART E - GROUNDWATER MONITORING (reserved)				
PART F - PREPAREDNESS AND PREVENTION				
F-1 Security				
F-1a Security Procedures and Equipment				
Unless a waiver is granted, the facility must demonstrate the following:	264.14 122.25(a)(4)	Ref. 59		
F-1a(1) 24-Hour Surveillance System	264.14(b)(1)	Ref. 59		
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel) that continuously monitors and controls entry onto the active portion of the facility; or				
F-1a(2) Barrier and Means to Control Entry				
F-1a(2)(a) Barrier	264.14(b)(2)(i)	Ref. 59	(a)(4)	natural barrier bluffs, valley's boundary and streams. Need to indicate height of fence
An artificial or natural barrier (e.g., a fence in good repair or a fence combined with a cliff) that completely surrounds the active portion of the facility; and				
F-1a(2)(b) Means to Control Entry	264.14(b)(2)(ii)			use gates
A means to control entry, at all times, through the gates or other entrances to the active portion of the facility (e.g., an attendant,				

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<p>television monitors, locked entrance, or controlled roadway access to the facility).</p> <p>F-1a(3) Warning Signs</p> <p>The facility must have a sign with the legend, "Danger - Unauthorized Personnel Keep Out", which must be posted at each entrance to the active portion of the facility and at other locations, in sufficient numbers to be seen from any approach to this active portion. The legend must be written in English and in any other language predominant in the area surrounding the facility and must be legible from a distance of at least 25 ft. Existing signs with a legend other than "Danger - Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous.</p>	264.14(c)		(a)(4)	<p>are signs in appropriate appropriate location & visible from 25' away</p> <p>^{NO} storage area - less than 90 days</p>
<p>F-1b Waiver</p> <p><u>If a waiver of these requirements is requested, the owner or operator must demonstrate the following:</u></p>	264.14(a)		None requested	
<p>F-1b(1) Injury to Intruder</p> <p>Physical contact with the waste, structure, or equipment within the active portion of the facility will not injure unknowing or unauthorized persons or livestock that may enter the active portion of a facility; and</p>	264.14(a)(1)	Ref. 36, Ch. 5, Secs. 2 and 4		
<p>F-1b(2) Violation Caused by Intruder</p> <p>Disturbance of the waste or equipment by the unknowing or unauthorized entry of persons or livestock onto the active portion of a facility will not cause a violation of the requirements of this part.</p> <p>To address F-1b(1) and F-1b(2) the applicant should include:</p> <ul style="list-style-type: none"> • The nature and extent of hazard potential from wastes; • Duration of hazard potential • Equipment and structures to minimize the potential for an intruder to 	264.14(a)(2)	<p>Ref. 36, Ch. 5, Secs. 3 and 4</p> <p>Ref. 30, pp. 331-1106; Ref. 60; Ref. 61</p>		

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p>(1) cause a spill; (2) mix incompatible, ignitable, or reactive wastes; (3) damage containment systems; (4) damage monitoring systems</p> <ul style="list-style-type: none"> • Features that prevent contact with waste 				
<p>F-1c Equipment Requirements</p> <p>Unless it can be demonstrated that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below, the facility must have the following equipment:</p>	264.32			
<p>F-1c(1) Internal Communications</p> <p>An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel.</p>	264.32(a)		MAPS	Identified on maps (Disaster born particular signal not identified)
<p>F-1c(2) External Communications</p> <p>A device such as a telephone (immediately available at the scene of operations) or a handheld two-way radio, for summoning emergency assistance from local police departments, or state or local emergency response teams.</p>	264.32(b)		not identified	telephone (assume)
<p>F-1c(3) Emergency Equipment</p> <ul style="list-style-type: none"> • Portable fire extinguishers • Fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals) • Spill control equipment • Decontamination equipment 	264.32(c)	Ref. 63, Secs. 4-7, 5-5, 6-8, 8-6, 9-4; Ref. 30; Sec. 7; Ref. 75; Ref. 76	Proffer	see attachment F Some not identified on Proffer
<p>F-1c(4) Water for Fire Control</p> <ul style="list-style-type: none"> • Water at adequate volume and pressure to supply water hose streams • Foam producing equipment • Automatic sprinklers or water spray systems 	264.32(d)		Not identified	
<p>F-1d Aisle Space Requirement</p> <p>Requests for a waiver of the aisle space requirement must be accompanied by a demonstration that aisle space is not needed to allow the unobstructed movement of personnel, fire protection equipment, or spill control equipment to any area of facility operation in an emergency.</p>	264.35		not identified	used control + unobstruction

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F-1e Preventive Procedures, Structures, and Equipment	122.25(a)(8)			
A description of procedures, structures, or equipment used at the facility for the following:				
F-1e(1) Loading/Unloading Operations Prevention of hazards in unloading operations (e.g., use of ramps or special forklifts).	122.25(a)(8)(i)	Ref. 30, Sec. 7	a(8) (i)	<i>Could use buckets to contain leaks at the connections of hoses.</i>
F-1e(2) Runoff Prevention of runoff from hazardous waste handling areas to other areas of the facility or environment, or prevention of flooding (e.g., berms, dikes, trenches).	122.25(a)(8)(ii)		a(8) ii	<i>all go to the surface ^{HAZ. waste.} impoundment</i>
F-1e(3) Water Supplies Prevention of contamination of water supplies.	122.25(a)(8)(iii)		a(8) ii	
F-1e(4) Equipment and Power Failure Mitigation of effects of equipment failure and power outages.	122.25(a)(8)(iv)		a(8) ii	<i>should use back up generators for power failure of Back up equipment (tanks, containers) for equipment failures</i>
F-1e(5) Personnel Protection Equipment Prevention of undue exposure of personnel to hazardous waste (e.g., protective clothing).	122.25(a)(8)(v)	Ref. 62, Ch. 4-7; Ref. 39, Ch. 2, Part 4	a(8) ii	<i>should use full suit gear for major spill. Should use respirators for day/ day operation</i>
F-1f Prevention of Reaction of Ignitable, Reactive and Incompatible Wastes				
F-1f(1) Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste	122.25(a)(9) 264.17(a)		a(8) ii	
A description of the precautions taken by a facility that handles ignitable or reactive waste to prevent actual ignition, including separation from sources of ignition such as open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., heat producing chemical reactions), and radiant heat. Demonstration that when ignitable or reactive waste is being handled, the owner or operator confines smoking and open flames to specially designated locations. "No Smoking" signs must be conspicuously placed wherever a hazard exists from ignitable or reactive waste.				<i>N/A what of the acids not necessarily with the waste</i>

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<p>F-1f(2) <u>General Precautions for Handling Ignitable or Reactive Waste and Mixing of Incompatible Waste</u></p> <p>A description of the precautions taken by a facility that treats, stores, or disposes of ignitable or reactive waste, or accidentally mixes incompatible waste or incompatible wastes and other materials, to prevent reactions which: (1) generate extreme heat or pressure, fire or explosions or violent reactions; (2) produce uncontrolled flammable fumes, dusts, or gases in sufficient quantities to threaten human health or the environment; (3) produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions; (4) damage the structural integrity of the device or facility; (5) by similar means threaten human health or the environment.</p>	<p>122.25(a)(9) 264.17(b)</p>			<p><i>N/A</i></p>
<p>F-2 <u>Inspection Schedule</u></p>	<p>122.25(a)(5) 264.15</p>			
<p>F-2a <u>General Inspection Requirements</u></p> <p>A description of the facility schedule for inspection of monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment that are vital to prevent, detect, or respond to environmental or human health hazards. (Schedule must be kept at the facility.) Examples of monitoring equipment on incinerators that should be inspected are waste flow monitors and recorders, auxiliary fuel, flow monitors, combustion air flow monitors, combustion and other temperature monitors, flame sensors, CO monitors and recorders, pressure differential indicators, pressure sensors, pH monitors, and ammeters for measuring blower current draw.</p> <p>Examples of emergency equipment include hazardous gas detectors, communication systems, alarm systems, emergency power and lighting equipment (e.g., auxiliary generator), fire protection equipment (e.g., fire extinguishers, sprinkler systems, fire hydrants, hoses, etc.), spill control equipment (e.g., booms, absorbents, pumps, portable tanks, skimmers, etc.), decontamination equipment (e.g., steam cleaners, high-pressure water, etc.).</p> <p>Examples of safety equipment that should be inspected includes respirators and self-contained</p>	<p>264.15(a) and (b) 264.33</p>	<p>Ref. 62, Ch. 9 Ref. 63, Vol. 12 Ref. 63 Ref. 63 Ref. 63, Vol. 1</p>		<p><i>(see attachment J)</i></p> <p><i>must also ensure weeds are removed for visual inspection need to include remarks or comments on the inspection log.</i></p> <p><i>They state "the storage area drums & tanks do not con under RCRA 490 day disposal." but provide inspection log, although inadequate</i></p>

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breathing apparatus, protective clothing, emergency showers and eyewashes, first aid supplies, and hearing protection devices.			1	<i>Same as P 24 above</i>
F-2a(1) <u>Types of Problems</u> The schedule must identify the types of problems to look for during the inspection (e.g., leaks, deterioration, readings out of specified range, missing items or materials, inoperative equipment, etc.).	264.15(b)(3)			
F-2a(2) <u>Frequency of Inspection</u> A description of the frequency of inspection for items on the schedule. The frequency of inspection should be based on the rate of possible deterioration of equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. Incinerators and associated equipment such as pumps, valves, piping, ductwork, pollution control devices, etc., must be inspected daily for leaks, spills, and fugitive emissions. All emergency waste feed cut-off valves must be inspected at least weekly to verify proper operation. All system alarms must also be tested daily.	264.15(b)(4) 264.347(3)			" "
F-2b <u>Inspection Log</u> A description of the inspection log or summary including the following: <ul style="list-style-type: none"> • Dates and times of inspections • Name(s) of inspector(s) • Observations made • Date and nature of repairs or remedial actions 			<i>Log.</i>	<i>x must be identified on log</i>
PART G - CONTINGENCY PLAN A copy of the Contingency Plan or Spill Prevention control and Countermeasures (SPCC) Plan amended for hazardous waste management to describe the actions facility personnel will take in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, surface water, or groundwater at the facility.	122.25(a)(7) 264.50 through 264.56	Ref. 36, Ch. 2; Ref. 64-68		

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
G-1 General Information Facility name and location, operator, site plan, and description of facility operations.		Ref. 36, Ch. 2	Not identified	Not submitted
G-2 Emergency Coordinators Names, addresses, office and home phone numbers, and duties of primary and alternate coordinators and a statement authorizing designated coordinators to commit the necessary resources to implement the contingency plan.	264.52(d) 264.55	Ref. 36, Ch. 2	Furlex	no address or office tele #'s
G-3 Implementation A description of how and when the contingency plan will be implemented.	264.52(a) 264.56(d)	Ref. 64; Ref. 65; Ref. 68	Part 3	
^{4a} G-3a Notification Methodology for immediate notification of facility personnel and necessary state or local agencies.	264-56(a)	Ref. 64; Ref. 68	local agency notification	Dept. of Health does not take this role Record should be notified but personnel not. Local team 3rd, + state + Fed last,
^{4b} G-3b Identification of Hazardous Materials Available data and/or procedures for identification of hazardous materials involved in the emergency and quantity and areal extent of release. Also include information on: <ul style="list-style-type: none"> • Biological, physical, and chemical properties of the waste, including vapor pressure, density, solubility, and pH • Potential hazards (e.g., toxic, explosive, reactive) 	264.56(b)	Ref. 36, Ch. 2; Ref. 69	Not identified	DO NOT quote the regs must explain how Vetac will do this (Inspection Log etc.)
^{4c} G-3c Hazard Assessment Policy for assessment of possible hazards to the environment and human health and need for evacuation and notification of authorities. The authorities to be notified should include the On-Scene-Coordinator for that area or the National Response Center.	264.56(c) 264.56(d)	Ref. 36, Ch. 2; Ref. 64; Ref. 65; Ref. 68; Ref. 70; Ch. 1; Ref. 30; Ref. 60; Ref. 61	Not identified	Same as above may use safety data sheets
^{4d} G-3d Control Procedures Specific response and control procedures to be taken in the event of a fire, explosion, or release of hazardous waste to air, land, or water. For incinerators, response procedures to possible incinerator malfunctions, including procedures for rapidly stopping waste feed, shutting down incinerator, and controlling emissions.	264.52(a) 122.27(b)(2)(ii) (6)	Ref. 33; Ref. 34; Ref. 44, Ch. 4; Ref. 36; Ch. 2; Ref. 64-68; Ref. 71; Ref. 72; Ref. 70		Same as above

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<p>G-3a <u>Prevention of Recurrence or Spread of Fires, Explosions, or Releases</u> 4c</p> <p>During an emergency situation, a description of the necessary steps to be taken to ensure that fires, explosions, or releases do not occur, reoccur, or spread to other hazardous waste at the facility. Steps should include:</p> <ul style="list-style-type: none"> • Shut-down of processes and continued monitoring of them • Collecting, containing, and treating released wastes • Removing and isolating containers and tanks • Proper use of fire control structures (e.g., fire doors), systems (e.g., sprinkler systems), and equipment (e.g., extinguishers) 	264.56(e)	Ref. 36, Ch. 2; Ref. 71; Ref. 73; Ref. 74	Inspection not indicated	Need identify how these will be accomplished *
<p>G-3f <u>Storage and Treatment of Released Material</u> 4e</p> <ul style="list-style-type: none"> • Provisions for treatment, storage, or disposal of any hazardous wastes resulting from a release, fire, or explosion at the facility • Equipment and manufacturer available • Procedures for deployment of these resources • Methods to contain, treat, and clean up a hazardous release and decontaminate the affected area 	264.56(g)	Ref. 70, Ch. 3 and 4	mentioned in inspection section	not provided for *
<p>G-3g <u>Incompatible Waste</u> 4g</p> <p>Provisions for prevention of incompatible waste from being treated, stored, or located in the affected areas until cleanup procedures are completed.</p>	264.56(h)(1)	Ref. 36, Ch. 2	not identified	note: waste should not be incompatible not submitted
<p>G-3h <u>Post-Emergency Equipment Maintenance</u> 4h</p> <p>Procedures for ensuring that all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.</p>	264.56(h)(2)	Ref. 36, Ch. 2	not identified	not submitted
<p>G-4 <u>Emergency Equipment</u> 4k</p> <p>Location, description, and capabilities of emergency equipment. This should include:</p> <ul style="list-style-type: none"> • Spill control equipment • Fire control equipment • Personnel protective items such as respirators and protective clothing • First aid and medical supplies 	264.52(e)	Ref. 71; Ref. 36, Ch. 2; Ref. 70; Ref. 30; Ref. 75; Ref. 76; Ref. 62, Ch. 5; Ref. 70, Ch. 2, Part 3	Saw maps	See attachment I * Does not provide Provides

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4k

Should have been addressed in inspection log

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<p><u>G-5 Coordination Agreements</u></p> <p>9-6 • A description of the coordination agreement with local police and fire departments, hospitals, contractors, and state and local emergency response teams to familiarize them with the facility and actions needed in case of emergency</p> <p>• A statement indicating that a copy of the contingency plan has been submitted to these organizations</p> <p>• If applicable, documentation of refusal to enter into a coordination agreement</p>	264.52(c) 264.37	Ref. 36, Ch. 2	3.2 - 3.4	<i>Copies sent to local authorities need to describe agreement.</i>
<p><u>G-6 Evacuation Plan</u></p> <p>6-7 The plan must include a description of signal(s) to be used to begin evacuation, with primary and alternate evacuation routes.</p>	264.52(f)	Ref. 36, Ch. 2, Ref. 36, Ch. 2,	<i>not indicated</i>	
<p><u>G-7 Required Reports</u></p> <p>9-3 Provisions for submission of reports of emergency incidents within 15 days of occurrence, and notation of such incidents in the operating record identifying the time, date, and details of these emergency incidents.</p>	264.56(j)	Ref. 36, Ch. 2	Part 3 2.1(2)	<i>OK. Copied out of Regs.</i>
<p>PART H - PERSONNEL TRAINING</p>	122.25(a)(12)	Ref. 77		
<p><u>H-1 Outline of Training Program</u></p> <p>An outline of both the introductory and continuing training programs by owners or operators to prepare the personnel to operate and maintain the facility in a safe manner. Includes a brief description on how training will be designed to meet actual job tasks. (Note: on-the-job training may be used to comply with these requirements.)</p>	264.16		<i>not indicated</i>	
<p><u>H-1a Job Titles and Duties</u></p> <p>The name, job title, duties, and job description of each employee whose position at the facility is related to hazardous waste management.</p>	264.16(d)(1) 264.16(d)(2)	Ref. 77	Part B 264.16 3.2(2)(3)	<i>Only 3 people identified</i>
<p><u>H-1b Training Content, Frequency, and Techniques</u></p> <p>A description of the content, frequency, and technique used in both introductory and continuing training (including an annual review of the initial training) for each employee.</p>	264.16(d)(3) 264.16(c)	Ref. 77		<i>OK.</i>

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H-1c Training Director Demonstration that the program is directed by a person trained in hazardous waste management.	264.16(a)(2)	Ref. 77	264.16 30.1(2)(3)	Has Mr. Marston attended RCRA courses and which degree does he have?
H-1d Relevance of Training to Job Position A brief description of how instruction of facility personnel in hazardous waste management procedures (including contingency plan implementation) is relevant to their positions.	264.16(1)	Ref. 77, Ch. 5	11	all should receive training & been given copies of the Contingency Plan
H-1e Training for Emergency Response Documentation that the training program trains facility personnel to respond effectively to emergencies and trains them to be familiar with emergency procedures, emergency equipment, and emergency systems.	264.16(a)(3)	Ref. 77	not indicated	
H-1e(1) Procedures for Using, Inspecting, Repairing, and Replacing Facility Emergency and Monitoring Equipment		Ref. 77		
H-1e(2) Key Parameters for Automatic Waste Feed Cutoff Systems Some key parameters include: <ul style="list-style-type: none"> • Type of valve (e.g., diaphragm, solenoid, or fusible element) and how it basically operates • Whether the valve fails in an open or closed position • Whether the valve is pneumatically, hydraulically, electrically, or in the case of fusible element, heat activated • Whether or not there is a manual override in case of valve failure and how to manually operate the valve. 		Ref. 77		
H-1e(3) Communications or Alarm Systems		Ref. 77		
H-1e(4) Response to Fires		Ref. 77; Ref. 30		
H-1e(5) Response to Groundwater Contamination Incidents		Ref. 77; Ref. 66; Ref. 78		
H-1e(6) Shutdown of Operations		Ref. 77		
H-2 Implementation of Training Program Indication that training has been and will be successfully completed by facility personnel	264.16(d)(4) 264.16(b)	Ref. 77		

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p>within 6 months of their employment or assignment to a facility, or transfer to a new position at a facility, whichever is later. Employees hired after the effective date of these regulations must not work in unsupervised positions until they have completed the training requirements. Records documenting that the required training has been given to and completed by facility personnel must be maintained.</p>			<i>not indicated</i>	
<p>PART I - CLOSURE PLANS</p>	<p>122.25(a)(13); 264.110-264.115 264.351</p>	<p>Ref. 79; Ref. 80; Ref. 81; Ref. 82</p>		
<p>I-1 Closure Plans</p> <p>A copy of the written closure plan consistent with items I-1a through I-1k.</p>	<p>122.25(a)(13) 264.112</p>			
<p>I-1a Partial Closure</p> <p>If partial closure is anticipated, a description of how and when the facility will be partially closed, including an identification of the maximum extent of operation after partial closure.</p>	<p>264.112(a)(1)</p>	<p>Ref. 80; Ref. 81</p>		
<p>I-1b Final Closure</p> <p>A description of how and when the facility will be finally closed.</p>	<p>264.112(a)(1)</p>	<p>Ref. 79-82</p>		
<p>I-1c Maximum Waste Inventory</p> <p>A description of the maximum inventory of wastes that could be in storage and treatment at any time.</p>	<p>264.112(a)(2)</p>	<p>Ref. 79-82</p>		
<p>I-1d Closure Performance Standard</p> <p>A description of how closure minimizes the need for post-closure maintenance and minimizes releases of hazardous wastes, leachate, and contaminated rainfall to the air, groundwater, surface water, and surrounding land.</p>	<p>264.111</p>	<p>Ref. 80, Ref. 81</p>		
<p>I-1e Schedule for Closure</p> <p>An estimate of the expected year of closure and schedule for final closure including total time to close the facility and time for closure activities.</p>	<p>264.112(a)(4)</p>	<p>Ref. 80, Ref. 81</p>		

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within 6 months of their employment or assignment to a facility, or transfer to a new position at a facility, whichever is later. Employees hired after the effective date of these regulations must not work in unsupervised positions until they have completed the training requirements. Records documenting that the required training has been given to and completed by facility personnel must be maintained.				
PART I - CLOSURE PLANS	122.25(a)(13); 264.110-264.115 264.351	Ref. 79; Ref. 80; Ref. 81; Ref. 82		
I-1 Closure Plans	122.25(a)(13) 264.112			
A copy of the written closure plan consistent with items I-1a through I-1k.				
I-1a Partial Closure	264.112(a)(1)	Ref. 80; Ref. 81		A plan has been submitted but it is not adequate. N/A
If partial closure is anticipated, a description of how and when the facility will be partially closed, including an identification of the maximum extent of operation after partial closure.				
I-1b Final Closure	264.112(a)(1)	Ref. 79-82		The description given is not detailed enough and doesn't tell how it will be done in detail. There is not an estimate of when the facility will be closed.
A description of how and when the facility will be finally closed.				
I-1c Maximum Waste Inventory	264.112(a)(2)	Ref. 79-82		There is not an estimate or any description of the maximum inventory. The worst case is not addressed. (How many drums etc.)
A description of the maximum inventory of wastes that could be in storage and treatment at any time.				
I-1d Closure Performance Standard	264.111	Ref. 80, Ref. 81		There is not a closure performance standard
A description of how closure minimizes the need for post-closure maintenance and minimizes releases of hazardous wastes, leachate, and contaminated rainfall to the air, groundwater, surface water, and surrounding land.				
I-1e Schedule for Closure	264.112(a)(4)	Ref. 80, Ref. 81		There is not a schedule for closure and a schedule for activities of closure.
An estimate of the expected year of closure and schedule for final closure including total time to close the facility and time for closure activities.				

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<p>I-1e(1) <u>Time Allowed for Closure</u></p> <p>A schedule for closure which shows that all hazardous wastes will be treated, removed off-site, or disposed of on-site within 90 days from receipt of final volume of waste, and that all closure activities will be completed within 180 days from receipt of final volume of waste.</p>	264.113(a) and (b)			<i>This is not addressed</i>
<p>I-1e(1)(a) <u>Extensions for Closure Time</u></p> <p>A petition made to the Regional Administrator for a schedule for closure which exceeds the 90 days for treatment, removal, or disposal of wastes and/or the 180 days for completion of closure activities made to the Regional Administrator.</p>	264.113(a) 264.113(b)			
<p>I-1f <u>Disposal or Decontamination of Equipment</u></p> <p>A description of how all facility equipment and structures will be decontaminated or disposed of when closure is completed.</p>	264.114	Ref. 80; Ref. 81		<i>Decontamination is not addressed.</i>
<p>I-1g <u>Closure of Specific TSD Alternatives</u></p> <p>I-1g(1) <u>Containers</u></p> <p>A description of how at closure, all hazardous waste residues will be removed from the containment system, and how remaining containers, bases, and soil containing or contaminated with hazardous waste or hazardous waste residues will be decontaminated or removed. The description should address the following:</p> <ul style="list-style-type: none"> • Container removal, recycling • Site decontamination • Disposal of contaminated soils • Facility decontamination • Drum cleaning • Drum reconditioning (pesticides) 	264.178	Ref. 2, Ch. 4, Sec. C-5 Ref. 15, Sec. 4.24 Ref. 3, Ch. 6-B2 Ref. 40, pp. 9, 15, and 16 Ref. 41		
<p>I-1g(2) <u>Tanks</u></p> <p>A description of how at closure, all hazardous waste residues will be removed from tanks, discharge control equipment, and discharge confinement structure, and the facility will be decontaminated. The description should address the following:</p>	264.197			

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<ul style="list-style-type: none"> • Tank closure plan guidance • Maximum amount of inventory • Waste removal from tanks • Facility decontamination procedures 		Ref. 43, Ch. 3 Ref. 43, Ch. 3.3.1 Ref. 3, Ch. 6-B1 Ref. 3, Ch. 6-B2		
<p>1-1g(3) <u>Waste Piles</u></p> <p>A description of how at closure, all hazardous waste residues will be removed from the pile, and any component of the containment system containing or contaminated with hazardous waste or hazardous waste residues will be decontaminated or removed. The description should address the following:</p> <ul style="list-style-type: none"> • Wet method for sediment removal • Dry methods for sediment removal • Sediment dewatering • Soil removal • Liner removal methods • Air emission control 	264.250	Ref. 15, Sec. 4.2.1 Ref. 15, Sec. 4.2.2 Ref. 15, Sec. 4.3 Ref. 15, Sec. 4.2.4 Ref. 15, Sec. 4.4.2 Ref. 15, Sec. 4.9		
<p>1-1g(4) <u>Surface Impoundments (reserved)</u></p>				
<p>1-1g(5) <u>Incinerators</u></p> <p>Description of how at closure all hazardous residues will be removed from the incinerator, associated ductwork, piping, air pollution control equipment, sumps, and any other structures or operating equipment such as pumps, valves, etc., that have come into contact with a hazardous waste or hazardous waste constituent. Alternatively, a description of how the incinerator and associated units and equipment will be dismantled and disposed of as a hazardous waste will suffice. In most cases, cleanup and disposal will be involved. It should be noted how wastes generated from cleanup will be disposed of also.</p>	264.351			
<p>1-1h <u>Closure Plan Amendment</u></p> <p>If changes in operating plans or facility design affect the closure plan or the expected year of closure changes, a modification of the closure plan.</p>	264.112(b)	Ref. 80, Secs. 2.5, 11.1, 13.2.2; Ref. 81, Secs. 2.5, 11.1, 13.2.2		
<p>1-2 <u>Postclosure (Reserved)</u></p>				
<p>1-3 <u>Notice in Deed and Notice to Land Authority (Reserved)</u></p>		Ref. 83; Ref. 84; Ref. 85		

The Closure Plan does not include a cost or a statement that a "P E will certify that closure has been performed according to the closure plan."

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p>I-4 Closure Cost Estimate</p> <p>A copy of the most recent closure cost estimate, calculated to cover the cost of closure when the cost would be greatest. The cost must be updated annually using an inflation factor.</p>	122.25(a)(15) 264.142	Ref. 83; Ref. 85; Ref. 86		<i>Inadequate - This should be more detailed bids attached. The same for Post closure Cost Estimate.</i>
<p>I-5 Financial Assurance Mechanism for Closure</p> <p>A copy of the established financial assurance mechanism for facility closure. The mechanism must be one of the following: I-5(a) through I-5(c).</p>	122.25(a)(15) 264.143	Ref. 85, Sec. HH		
<p>I-5a Closure Trust Fund</p> <p>A copy of the closure trust fund agreement with the wording required in 264.151(a)(1) and a formal certification of acknowledgment.</p>	264.143(a) 264.143(a)(1)	Ref. 85, Sec. HH		<i>5,250²⁰ - Vertical must change 4105,000 The pay in schedule to 10 yrs.</i>
<p>I-5b Surety Bond</p> <p>I-5b(1) Surety Bond Guaranteeing Payment Into a Closure Fund</p> <p>A copy of the surety bond with the wording required in 264.151(b), a copy of the standby trust fund, and a written guarantee that the owner or operator will fund the standby fund at least 60 days before final closure begins and will provide alternate financial assurance if the bond is cancelled.</p>	264.143(b) 264.151(b)	Ref. 85, Sec. HH Ref. 85, Sec. HH		
<p>I-5b(2) Surety Bond Guaranteeing Performance of Closure</p> <p>A copy of the surety bond with the wording required in Part 264.151(c), guaranteeing that the owner or operator will perform closure according to the closure plan and the requirements of Subpart H.</p>	264.143(c) 264.151(c)	Ref. 85, Sec. HH		
<p>I-5c Closure Letter of Credit</p> <p>A copy of an irrevocable letter of credit with the wording required in 264.151(d) and a copy of the standby trust fund agreement. The letter of credit must be issued for a period of at least one year and be for the amount of estimated closure.</p>	264.143(d) 264.151(d)	Ref. 85, Sec. HH		
<p>I-5d Closure Insurance</p> <p>To demonstrate that the owner or operator has closure insurance, he or she must submit</p>	264.143(e)			

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
to the Regional Administrator 60 days before hazardous waste is received a certificate of insurance worded as specified in 264.151(e).				
<p>1-5e <u>Financial Test and Corporate Guarantee for Closure</u></p> <p>To demonstrate that this test is met, an owner or operator must submit a letter signed by the company's chief financial officer that is worded as specified in 264.151(f). He or she must also submit a copy of a report on the company's latest financial statements drafted by an independent certified public accountant (CPA) and a copy of a report from the owner's or operator's independent CPA to the owner or operator stating that he or she has examined the data in the letter from the chief financial officer and has found no reason to change any of the data. In lieu of the above items, the owner or operator may submit a corporate guarantee worded as required by 264.151(h). This guarantee provides that the guarantor, which must be the parent company of the owner or operator, will perform final closure in accordance with the closure plan if the owner or operator fails to do so or will establish a closure trust fund for the owner or operator. A copy of these items should be submitted with the Part B for review by the permit writer.</p>	264.143(f)			
<p>1-5(f) <u>Use of Multiple Financial Mechanisms</u></p> <p>A copy of a combination of trust fund agreements, surety bond guaranteeing payment into a closure trust fund or letters of credit, which provide financial assurance for the amount of closure.</p>	264.143(g)	Ref. 85, Sec. 101		
<p>1-5(g) <u>Use of Financial Mechanism for Multiple Facilities</u></p> <p>A copy of a financial assurance mechanism for more than one facility showing for each facility, the EPA ID number, name, address, and amount of funds closure assured by the mechanism. A letter of credit may not be used to assure funds in more than one region.</p>	264.143(h)	Ref. 85, Sec. 101		
<p>1-6 <u>Post-Closure Cost Estimate (Reserved)</u></p>				
<p>1-7 <u>Financial Assurance Mechanism for Post-Closure (Reserved)</u></p>				
<p>1-8 <u>Liability Requirements</u></p>	264.147(a) 264.147(b)			over

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p><u>I-8a Sudden Accidental Occurrences</u></p> <p>Hazardous waste treatment, storage, or disposal facilities must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences in the amount of at least \$1 million per occurrence, with an annual total of at least \$2 million.</p>				
<p><u>I-8a(1) Coverage for Sudden Accidental Occurrences</u></p> <p>A signed duplicate original of the Hazardous Waste Facility Liability Endorsement worded as specified in 264.151(i) or a Certificate of Liability Insurance worded as specified in 264.151(j) must be submitted to the Regional Administrator(s) (i.e., if facilities are located in more than one region a duplicate of the endorsement or certificate must be sent to the Administrator in each Region). The financial responsibility levels specified above for liability insurance for sudden accidental occurrences may be adjusted downward if the owner or operator can prove to the Regional Administrator that these levels are not consistent with the degree and duration of risk at the owner's or operator's facility. Conversely, the Regional Administrator may adjust the levels of financial responsibility up or down, based on the Administrator's assessment of the degree and duration of risk associated with the facility.</p> <p>For nonsudden accidental occurrences an amount of at least \$3 million per occurrence with an annual total of at least \$6 million is required. Liability insurance for nonsudden occurrences will not be required for tank container or waste pile storage or for incineration facilities unless the Regional Administrator determines that a particular facility of these types poses a significant risk to human health and the environment from nonsudden accidental occurrences. The mechanisms for demonstrating compliance with these requirements are discussed below.</p> <p>Alternatively, an owner or operator may satisfy the liability requirements by passing a financial test. If he or she</p>	<p>264.147 (a through d) 264.151 (g,i,j)</p>			<p><i>The certificates for sudden ins. do not meet the DNR standards. They are not worded properly.</i></p> <p><i>Non sudden cert is not worded properly & does not meet the requirements required by the HW regulations.</i></p>

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p>takes this route, he or she is required to submit to the Regional Administrator (1) a letter signed by the owner's or operator's chief financial officer worded as specified in 264.151(g), (2) a copy of a report drafted by an independent certified public accountant discussing the owner's or operator's financial statements for the latest fiscal year, and (3) a special report from the owner's or operator's independent CPA stating that he has examined the data in the letter from the chief financial officer and has found nothing that would require any adjustments of the data.</p>				
<p>1-9 Proof of Coverage by a State Financial Mechanism</p> <p>Where a state has hazardous waste regulations with equivalent or greater liability requirements for financial assurance for closure and post-closure care, a copy of the state-required financial mechanisms, including the facility EPA ID number, name, address, and amounts of coverage. If a state assumes legal responsibility for compliance with closure, post-closure, or liability requirements or the state assures that the state funds are available to cover those requirements, then facility is in compliance and may include a copy of a letter from the state describing the state assumption of responsibility and including the facility EPA ID number, name, address, and amounts of liability coverage or funds for closure or post-closure care that are assured by the state. If state coverage is less than federal requirements (264.143, 145, and 147), then the owner or operator must provide demonstration of additional financial assurance mechanisms to equal federal requirements.</p>				
<p>PART J - OTHER FEDERAL LAWS</p> <p>Demonstration of compliance with the requirements of applicable Federal laws such as the Wild and Scenic Rivers Act National Historic Preservation Act of 1966, Endangered Species Act, Coastal Zone Management Act, Fish and Wildlife Coordination Act.</p>	<p>122.25(a)(20) 122.12</p>	<p>Ref. 3</p>		
<p>PART K - CERTIFICATION</p>				

Chuck -

Attached is my second review
of letters submitted. The
entire ~~to HFDW~~ is a
complete mess.

Also the Part B Trust Fund
is for an amount of money
different from the 2nd submitted.

If you have any questions call

Bob

①

Vertac Chemical - 2nd Review

25 - I-1a Closure Performance Standard
Does not address how this will be met - He is going to cover the sediment but does not say with what and ~~and~~ does not indicate how it will be kept dry.
* Vertac should refer ^{To} (quote) section 264.111

26 - I-16 ^{must meet 264.228 (a)} Final Closure Activities
How deep will you dredge.
To what levels ~~will~~ of contamination will you dredge. What is contained decontaminated?
How many samples will you take & at what cost. Where will they be taken?
How do you know the max. inventory is 6000 yd³.
* What is the ~~for~~ permeability of the cover? ^{compaction}
Explain how you will dredge the bottom of 142 & get it to #3. Explain how you will remove the top 5 feet of the dike around 142 & move it to #3.
? ~~Explain #4~~

What is the amount of fertilizer + grass seed to be used
Obtain a cost for all activities in your closure plan. Verify these costs by quotes or bids.

Post Closure -

Not detail enough - Describe the below listed what activities will be performed?

How often will it be inspected - by whom - at what cost? What will they look for.

How often will the area be mowed.

What are the costs for the above + for stopping erosion?

What ^{is the} function ~~of~~ the ^{facility} monitoring equipment (wells)

Must include costs for sampling ^{all} monitoring wells for thirty yrs.

Trust fund does not ensure wells will be sampled.

Need statement that Vector will sample the wells as Req. require

Monitor 4 downgradient + 1 upgradient ~~times~~ ^{twice} a year for 30 years

264.118

Permit

27 I-1C

MAX Inventory - how did Vertac arrive at 6000 yd³ as max inventory. This should be verified if possible.

28- I-1d

Decontamination - Vertac says there is no any contaminated equipment. The closure plan indicates they will use a bulldozer & some equipment to dredge the pond. There should be some other equipment also (how does the by-waste get to the impoundment? pipes)

29- I-1e Closure Schedule -

Remove the stupid asinine, two paragraphs & replace them with a schedule that would show the expected yr. of closure, total time to close, time for different closure activities, and an inspection schedule to be used during closure.

I-2
30 - Post Closure -

Describe how the functioning of the monitoring wells will be ensured as required by 264.118(a)(2)(ii).

Permit
cond.

I-3 Notice in Deed

Within 90 days after completion of closure, the Property Deed must be ~~changed~~ changed to indicate that haz. waste was managed at the site

I-4 + I-5
32 - Closure + Post Closure Cost Estimates

Refer to 1st letter -
Need verification + documentation.

I-5 Closure Trust Fund/Post Closure

Closure Trust Fund pay in schedule will be amended to allow for a 10 yr. pay in period. Has this yr. payment been made?

I-8 Liability Insurance

Certificates are improperly worded + must be corrected.

VERTAC CHEMICAL CORPORATION - LATE E REVIEW

October, 1987

List of Items Needing Attention

1. E-1 - Vertac General Description - Exclude all reference to the HSM process since it will not be permitted.
2. B-2 - Topographic Map - Include a more detailed topographic map indicating the 100-year floodplain to determine whether the 16,000-gallon tanks are in the floodplain.
3. D-2 - Tanks - We cannot accept a calculation of residence time as evidence that wastes are not stored over 90 days in the 16,000-gallon tanks. If the tanks can be drained until a steady, continuous flow ceases, the tanks can be regulated under the generator standards. If this is the case, this issue should be handled separately from the Part B. All information for these tanks should be excluded from the Part B and addressed in a separate document. Should the tanks not be able to meet the guidance for an empty tank, the tank checklist (attached) must be addressed. Corrosion of the 16,000-gallon tanks is the chief concern. More information on tank V-3 is needed to determine if it should be included in the permit. Is the DNEP process wastewater going to tank V-3 always neutralized? Describe the neutralization process in detail. Should wastewater from the DNEP process not always be neutralized before going to tank V-3, the tank checklist (attached) must be addressed for the tank. Otherwise, all information about tank V-3 should be excluded from the Part B application and discussed in a separate document.
4. F-1a - Security - Describe the fence height, material, and construction in more detail. Describe the procedure to access to the plant and the number of guards and their responsibilities. Warning signs must be legible from a distance of at least 25 feet.
5. F-2 - Inspections - The inspection sheet must be revised to show more detail. Examples of inspection logs and checklists for tanks and surface impoundments are included with Attachment I. These may be modified for Vertac's facility. Give a schedule for mowing the grass on the levees surrounding the impoundment.
6. F-3(1) - Internal Communications - A disaster horn is identified on the emergency equipment map but no particular signal is described which is capable of providing immediate emergency notification.
7. F-3(2) - Internal Communications - Describe the location or availability of a telephone or handheld two-way radio for coordinating emergency assistance from local police departments or other local emergency response teams.

- 8. F-3a(3) - Emergency Equipment - Spill control equipment must be identified. See Attachment I.
- 9. F-4a - Loading Operations - Describe the spill control measures available at the tank truck loading area for the two 16,000-gallon tanks.
- 10. G-1 - General Information - The facility name and location, operator, site plan and description of facility operations must be included for the benefit of local police and fire departments, hospitals, contractors, and State and local emergency response teams.
- 11. G-2 - Emergency Coordinators - The addresses and office and home telephone numbers of the coordinators must be given. Also, a statement authorizing designated coordinators to commit the necessary resources to implement the contingency plan must be included.
- 12. G-4a - Notification - The contingency plan must make it clear that the order of notification is the emergency coordinator, plant personnel, local authorities and emergency teams and lastly, State and federal authorities and emergency teams. The responsibilities attributed to the Department of Health under 3.5c. is actually the responsibility of the Bureau of Pollution Control. This must be corrected.
- 13. G-4b - Identification of Hazardous Material - Describe in more detail how released material will be identified. Which facility records and manifests will be used? Can material safety data sheets be used? What parameters will be analyzed for a chemical analysis?
- 14. G-4c - Control Procedures - Specific response and control procedures to be taken in the event of a spill or release of a hazardous waste must be given. An example which may be adapted by Vertac is attached. Section 264.227(b)(1) requires that when a dike leak is detected, flow into the impoundment must be shut off or stop the addition of wastes into the impoundment.
- 15. G-4e - Prevention of Recurrence of Spill or Release - Give a description of the necessary steps to be taken during an emergency situation to ensure that spills do not occur or recur. Steps should include: shut-down of processes and continued monitoring of them; and collecting, containing and treating released wastes. An example is also attached.
- 16. G-4f - Spill Response and Treatment - Give a description of the provisions for treatment, storage, or disposal of any hazardous wastes resulting from a release. A description of equipment available and procedures for deployment is needed. Also describe the methods to contain, treat, and clean up a hazardous release or decontaminate the affected area. An example is attached.

OK P A-7

2R

2R

9R

2R

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2R

2R

NZI

3-4h - Post-Emergency Equipment Maintenance - Describe the procedures for ensuring that all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

3R 6-5 - Emergency Equipment - Give descriptions and capabilities of emergency equipment including spill control equipment, fire control equipment, personnel protection items, first aid and medical supplies, and emergency decontamination equipment. See Attachment I.

Send copies of contingency plan to these and state that in part B

3R 6-6 - Coordination Agreements - Describe any coordination agreements with local police and fire departments, hospitals, contractors, and State and local emergency response teams in case of emergency.

3R 6-7 - Evacuation Plan - Include a plan that addresses the criteria for evacuation, a description of signal(s) to be used to begin evacuation and a description of evacuation routes.

CR 6-8a - Job Titles and Duties - List the names of the effluent operators.

3R 6-8b - Training Frequency and Techniques - For each employee involved in hazardous waste management, describe the frequency of training and techniques used in training.

3R 6-8c - Training for Emergency Response - Document that the training program trains facility personnel to respond effectively to emergencies and trains them to be familiar with emergency procedures, emergency equipment, and emergency systems.

3R 6-8d - Implementation of Training Program - Indicate that training has been and will be successfully completed by personnel within a month of their employment. A system must be developed to document that personnel receive an annual review by classroom or on-the-job training.

6-9a - Closure Impoundment Activities - Describe how closure will minimize the need for post-closure maintenance and will minimize or eliminate releases of hazardous wastes, hazardous waste constituents, leachate, and contaminated rainfall to the air, groundwater, surface water, and surface soils.

6-9b - Final Closure Activities - A more detailed description of the closure activities is needed. Give a more detailed drawing and description of the impoundment closure (i.e., final elevation of tanks are also to be permitted, these must be addressed in the closure plan.

27. I-1c - Maximum Inventory - Describe the maximum inventory of wastes that could be in storage at any time during the life of the facility.

28. I-1d - Decontamination - Describe the steps needed to decontaminate facility equipment during and after closure.

29. I-1e - Closure Schedule - Give an estimated expected year of closure. The closure schedule must include the total time to close, the time for the different closure activities, and inspection schedule during closure.

30. I-2 - Post Closure - Describe how the functioning of the monitoring wells will be ensured as required by 264.118(a)(2)(ii).

31. I-3 - Notice in Deed - A copy of the property deed is required with a notation concerning management of hazardous waste on the property.

32. I-4 & I-6 - Closure and Post Closure Cost Estimates - More detailed estimates are required for each item (i.e., labor, decontamination, erosion control, engineer's certification, earthwork, and equipment). Unit costs and quantity descriptions are needed. All costs must be estimated on a worst case basis, assuming a contractor will do the work.

33. I-5a - Closure Trust Fund - Because the permit will be written for a ten-year period, the Trust Fund pay in schedule must be amended to 10 years instead of 20 years.

34. I-8 - Liability Insurance - The certificates for both Sudden and Non-Sudden Insurance are worded improperly. These must be corrected. Copies of properly worded forms are attached.

35. Groundwater Monitoring -

a) Groundwater data cannot be "cut out" without resampling or analysis.

b) A more detailed scaled engineering drawing of sketch C(2) in the application is needed. Section 270.17(c)(3) requires a topographic map with delineation of the waste management area, the property boundary, the proposed "point of compliance", the location of groundwater monitoring wells, groundwater flow direction and groundwater contours.

The engineer's report describes the proposed groundwater monitoring program as required by Section 264.97. The application is deficient in the following areas: 1

description of the sampling and analysis procedures (i.e., sample collection, sample preservation and shipment, analytical procedure, and chain of custody control); description of why these sampling and analytical methods are appropriate and; a description of the method and sampling procedures for determining the groundwater monitoring location each time the groundwater is sampled.

- d) Submit engineering drawings describing the installation of wells 5, 6, 7 and 8 including the location of the well screen.
- e) The following indicator parameters must be analyzed for in the monitoring program: pH, specific conductance, TDS, TSS, BOD₅, Total Phosphorus, Atrazine, Total Phosphorus, and Benzoic Acid. Four replicate samples must be analyzed for at each completion point well.

VERTSC CHEMICAL CORPORATION - PART B REVIEW
October, 1967
List of Items Requiring Attention

1. B-1 - Verbal General Description - Exclude all references to the DNEP process since it will not be permitted.
2. B-1 - Topographic Map - Include a more detailed topographic map indicating the 100-year floodplain to demonstrate whether the 16,000-gallon tanks are in the floodplain.
3. B-2 - Tanks - We cannot accept a calculation of residence time as evidence that wastes are not stored over 90 days in the 16,000-gallon tanks. If the tanks can be drained until a steady, continuous flow ceases, the tanks can be regulated under the generator standards. If this is the case, this issue should be handled separately from the Part B. All information for these tanks should be excluded from the Part B and addressed in a separate document. Should the tanks not be able to meet the guidance for an empty tank, the tank checklist (attached) must be addressed. Corrosion of the 16,000-gallon tanks is the chief concern. More information on tank V-3 is needed to determine if it should be included in the permit. Is the DNEP process wastewater going to tank V-3 always neutralized? Describe the neutralization process in detail. Should wastewater from the DNEP process not always be neutralized before going to tank V-3, the tank checklist (attached) must be addressed for the tank. Otherwise, all information about tank V-3 should be excluded from the Part B application and discussed in a separate document.

72
4. F-1a - Security - Describe the fence height, material, and construction in more detail. Describe the procedure to gain access to the plant and the number of guards and their responsibilities. Warning signs must be visible from a distance of at least 25 feet.

John H.
5. F-2 - Inspections - The inspection sheet must be revised to show more detail. Examples of inspection logs and checklists for tanks and surface impoundments are included with Attachment I. These may be modified for Vertsc's facility. Give a schedule for moving the gates or the levees surrounding the impoundment.

72
6. B-1(d) - Internal Communication - A disaster horn is identified on the emergency equipment map but no particular signal is described which is capable of providing immediate emergency

7. B-1(d) - Emergency Communications - Include the location on the site of a telephone or broadcast emergency radio for contacting emergency assistance from local police departments, or other local emergency responders.

8. F-3a(3) - Emergency Equipment - Spill control equipment must be identified. See Attachment I.
9. F-4a - Loading Operations - Describe the spill control measures available at the tank truck loading area for the two 16,000-gallon tanks.
10. G-1 - General Information - The facility name and location, operator, site plan and description of facility operations must be included for the benefit of local police and fire departments, hospitals, contractors, and State and local emergency response teams.
11. G-2 - Emergency Coordinators - The addresses and office and home telephone numbers of the coordinators must be given. Also, a statement authorizing designated coordinators to commit the necessary resources to implement the contingency plan must be included.
12. G-4a - Notification - The contingency plan must make it clear that the order of notification is the emergency coordinator, plant personnel, local authorities and emergency teams and lastly, State and federal authorities and emergency teams. The responsibilities attributed to the Department of Health under 7.5c. is actually the responsibility of the Bureau of Pollution Control. This must be corrected.
13. G-4b - Identification of Hazardous Material - Describe in more detail how released material will be identified. Which facility records and manifests will be used? Can material safety data sheets be used? What parameters will be analyzed for a chemical analysis?
14. G-4d - Control Procedures - Specific response and control procedures to be taken in the event of a spill or release of a hazardous waste must be given. An example which may be adapted by Vertec is attached. Section 264.227(b)(1) requires that when a dike leak is detected, flow into the impoundment must be shut off or stop the addition of wastes into the impoundment.
15. G-4e - Prevention of Recurrence of Spill or Release - Give a description of the necessary steps to be taken during an emergency situation to ensure that spills do not occur or recur. Steps should include: shut-down of processes and continued monitoring of them; and collecting, containing and treating released wastes. An example is also attached.
16. G-4f - Spill Response - Describe the provisions for treatment, storage, or disposal of any hazardous wastes resulting from a release. A description of equipment available and procedures for deployment is needed. Also describe the methods to contain, treat, and clean up a hazardous spill and decontaminate the affected area. An example is attached.

- 20
 17. G-4h - Post-Emergency Equipment Maintenance - Describe the procedures for ensuring that all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.
- 20
 18. G-5 - Emergency Equipment - Give descriptions and capabilities of emergency equipment including spill control equipment, fire control equipment, personnel protection items, first aid and medical supplies, and emergency decontamination equipment. See Attachment I.
- 20
 19. G-6 - Coordination Agreements - Describe any coordination agreements with local police and fire departments, hospitals, contractors, and State and local emergency response teams in case of emergency.
- 20
 20. G-7 - Evacuation Plan - Include a plan that addresses the criteria for evacuation, a description of signal(s) to be used to begin evacuation and a description of evacuation routes.
- 20
 21. H-1a - Job Titles and Duties - List the names of the effluent operators.
- 20
 22. H-1b - Training Frequency and Techniques - For each employee involved in hazardous waste management, describe the frequency of training and techniques used in training.
- 20
 23. H-1c - Training for Emergency Response - Document that the training program trains facility personnel to respond effectively to emergencies and trains them to be familiar with emergency procedures, emergency equipment, and emergency systems.
- 20
 24. H-2 - Implementation of Training Program - Indicate that training has been and will be successfully completed by personnel within 12 months of their employment. Also, a system must be developed to document that personnel receive an annual review by classroom or on-the-job training.
- 25. I-1a - Closure Performance Standard - Describe how closure will minimize the need for post-closure maintenance and will minimize or eliminate releases of hazardous wastes, hazardous waste constituents, leachate, and contaminated rainfall to the air, groundwater, surface water, and surrounding land.
- 26. I-1b - Final Closure Activities - A more detailed description of the closure activities is needed. Give a more detailed drawing and description of the impoundment closure (i.e., final elevation of the impoundment, final closure of the impoundment, etc.). Closure activities given apply only to the surface impoundment. If tanks are also to be permitted, these must be addressed in the closure plan.

20. 1-10 - Maximum Inventory - Describe the maximum inventory of wastes that could be in storage at any time during the life of the facility.

21. 1-10 - Inventory Control - Describe the equipment needed to demonstrate facility equipment during all other phases.

22. 1-10 - Closure Schedule - Give an estimated expected year of closure. The closure schedule must include the total time to close, the time for the different closure activities, and inspection schedule during closure.

23. 1-8 - Post Closure - Describe how the functioning of the monitoring wells will be ensured as required by 264.106(c)(2)(ii).

24. 1-8 - Easement Deed - A copy of the property deed is required with a notetaker concerning management of hazardous waste on the property.

25. 1-10 - Closure and Post Closure Cost Estimates - Cost estimates are required for each step (i.e., labor, decontamination, closure control, engineer's certification, equipment, and materials). Unit costs and quantity descriptions are needed. All costs must be certified on a cost card issued by the contractor will do the work.

26. 1-10 - Closure Trust Fund - Because the permit will be written for a ten-year period, the Trust Fund pay in schedule must be amended to 15 years instead of 10 years.

27. 1-8 - Liability Insurance - The certificates for both CGL and Non-Fault Insurance are worded improperly. These must be corrected and certified on a cost card for the contractor.

28. Groundwater Monitoring -

a) Groundwater monitoring must be "best practice" with the following requirements:

b) A more detailed sealed construction plan is needed. Section 270.106(c)(2) requires a more detailed plan with details of the ground management system, as approved by the owner, the proposed "points of compliance", the location of groundwater monitoring wells, groundwater flow direction, and groundwater contours.

The following information is required for the permit application: 1) A detailed report covering the following areas: a) Groundwater monitoring plan as required by Section 264.106. The application is detailed in the following areas:

description of the sampling and analytic procedures (i.e., sample collection, sample preservation and shipment, analytical procedure, and chain of custody control); description of why these sampling and analytical methods are appropriate and; a description of the method and recording procedure for determining the groundwater surface elevation each time the groundwater is sampled.

- 8) Submit engineering drawings describing the installation of wells 3, 6, 7 and 8 including the location of the well screen.
- 9) The following indicator parameters must be analyzed for in the monitoring program: pH, specific conductance, TDS, TSS, DHEP, Toxaphene, Atrazine, Total Phorol, and Benzoic Acid. Four replicate samples must be analyzed for at each compliance point well.

Vertac
2nd Round

Freddie H. Roberts

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
E-7a (continued)				
<ul style="list-style-type: none"> Procedure for semiannually submitting written reports to the Regional Administrator on program effectiveness 	264.100(g)			
E-7b <u>Alternate Concentration Limits</u>	270.14(c)(8)			
<ul style="list-style-type: none"> Sufficient information to establish a compliance monitoring program Justification for proposed concentration limits meeting requirements of 264.94 				
PART F - PROCEDURES TO PREVENT HAZARDS		Ref. 70		
F-1 <u>Security</u>				
F-1a <u>Security Procedures and Equipment</u>	264.14 122.25(a)(4)	Ref. 59	(a)(4) F-1a	
<p>Unless a waiver is granted, the Part B must include a description of the security procedures and equipment required by 264.14:</p>				
F-1a(1) <u>24-Hour Surveillance System</u>	264.14(b)(1)	Ref. 59		
<p>A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel) that continuously monitors and controls entry onto the active portion of the facility:</p> <ul style="list-style-type: none"> Procedures and personnel to be used Location and description of equipment 	Guidance Guidance			
F-1a(2) <u>Barrier and Means to Control Entry</u>	264.14(b)(2)(i)	Ref. 59		
<p>(In lieu of a 24-hour surveillance system, the applicant may elect to use a barrier and other means to control entry.)</p>				
F-1a(2)(a) <u>Barrier</u>				
<p>An artificial or natural barrier (e.g., a fence in good repair or a fence combined with a cliff) that completely surrounds the active portion of the facility:</p>				
<ul style="list-style-type: none"> Height Material of construction 	Guidance Guidance		a(4) F-1a prop.	Fence must be placed around that portion of the impoundment that is not surrounded by the creek.

(continued)

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Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p>F-1a(2)(b) Means to Control Entry</p> <p>A means to control entry, at all times, through the gates or other entrances to the active portion of the facility (e.g., an attendant, television monitors, locked entrance, or controlled roadway access to the facility):</p> <ul style="list-style-type: none"> • Procedure and personnel to be used • Location and description of equipment 	<p>264.14(b)(2)(11)</p> <p>Guidance</p> <p>Guidance</p>			
<p>F-1a(3) Warning Signs</p> <p>The facility must have a sign with the legend, "Danger - Unauthorized Personnel Keep Out", which must be posted at each entrance to the active portion of the facility and at other locations, in sufficient numbers to be seen from any approach to the active portion. The legend must be written in English and in any other language predominant in the area surrounding the facility and must be legible from a distance of at least 25 ft. Existing signs with a legend other than "Danger - Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion and that entry onto the active portion can be dangerous.</p>	<p>264.14(c)</p>		<p>ref.</p>	<p>signs OK.</p>
<p>F-1b Waiver</p> <p>If a waiver of these requirements is requested, the owner or operator must demonstrate the following:</p>	<p>264.14(a)</p>			
<p>F-1b(1) Injury to Intruder</p> <p>Physical contact with the waste, structure, or equipment within the active portion of the facility will not injure unknowing or unauthorized persons or livestock that may enter the active portion of a facility; and</p>	<p>264.14(a)(1)</p>	<p>Ref. 36, Ch. 5, Secs. 2 and 4</p>		
<p>F-1b(2) Violation Caused by Intruder</p> <p>Disturbance of the waste or equipment by the unknowing or unauthorized entry of persons or livestock onto the active</p>	<p>264.14(a)(2)</p>	<p>Ref. 36, Ch. 5, Secs. 3 and 4</p>		

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Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p>F-1b(2) (continued)</p> <p>portion of a facility will not cause a violation of the requirements of 40 CFR Part 264.</p> <p>Note: To address F-1b(1) and F-1b(2) the applicant should include:</p> <ul style="list-style-type: none"> • Nature and duration of hazard potential from wastes • Equipment and structures to minimize potential for an intruder to 1) cause a spill; 2) mix incompatible wastes; 3) ignite ignitable or reactive wastes; 4) damage containment or monitoring systems • Features that prevent contact with waste 	<p>Guidance</p>			
<p>F-2 <u>Inspection Schedule</u></p> <p>A copy of the general inspection schedule required by 264.15(b) including, where applicable, specific requirements of 264.174, 264.194, 264.226, 264.254, 264.273, 264.303, and 264.347.</p>	<p>270.14(b)(5) 264.15</p>			
<p>F-2a <u>General Inspection Requirements</u></p> <p>A description of the facility inspection schedule (schedule must be kept at the facility) for the following equipment:</p> <ul style="list-style-type: none"> • Monitoring equipment • Emergency and safety equipment • Security devices • Operating and structural equipment that are vital to prevent, detect, or respond to environmental or human health hazards. • Testing as necessary of communications or alarm systems, fire protection equipment and decontamination equipment <p>Examples of monitoring equipment that should be inspected at treatment, storage, and disposal facilities are:</p> <ul style="list-style-type: none"> • Scales • Flow and liquid level monitors • Hazardous gas detectors • pH monitors • Leachate monitors • Pressure sensors • Temperature gauges 	<p>270.14(b)(5) 264.15(a) and (b)</p> <p>264.15(a) and (b)</p> <p>264.33</p> <p>Guidance</p>	<p>Ref. 62, Ch. 9; Ref. 63, Vol. 12; Ref. 63; Vol. 1</p>		

(continued)

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
F-2a (continued)				
<p>Examples of monitoring equipment that should be inspected at facilities with incinerators are:</p> <ul style="list-style-type: none"> • Waste flow monitors and recorders • Auxiliary fuel flow monitors • Combustion air flow monitors • Temperature monitors • Flame sensors • CO monitors and recorders • Pressure differential indicators • Pressure sensors • pH monitors • Ammeters for measuring blower current draw 	Guidance			
<p>Examples of safety and emergency equipment to be inspected at TSD facilities are:</p> <ul style="list-style-type: none"> • Respirators • Communication systems • Alarm systems • Emergency lighting and power systems • Smoke detectors • Fire protection equipment • First aid equipment and supplies • Decontamination equipment • Protective clothing 	Guidance			<p><i>on prop but not on inspection schedule</i></p> <p><i>generator, first aid equip, protective clothing</i></p>
<p>Examples of security devices to be inspected at TSD facilities are:</p> <ul style="list-style-type: none"> • Surveillance systems • Barrier surrounding facility • Locking devices 	Guidance			<p><i>Gates + locks</i></p>
<p>Examples of operating and structural equipment at TSD facilities are:</p> <ul style="list-style-type: none"> • Spill detection devices • Spill control and collection equipment • Fire and explosion barriers • Ventilation equipment • Sump pumps • Dikes, bases, and foundations 	Guidance			<p><i>spill control & collection equip.</i></p> <p><i>sump pumps, for for tanks.</i></p>
<p>In addition, areas such as waste storage, mixing, loading, and unloading areas, which are subject to spills, must be inspected.</p> <p>F-2a(1) Types of Problems</p> <p>The schedule must identify the types of problems to look for during the inspection (e.g., leaks, deterioration,</p>	264.15(b)(3)		F-2a(3)	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <i>not included</i> </div>

(continued)

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p>F-2b(2) (continued)</p> <ul style="list-style-type: none"> • A schedule describing the <u>daily</u> monitoring of monitoring equipment (e.g., pressure and temperature gauges) where present to ensure that the tank is operated according to design specifications • A schedule showing the level of waste in uncovered tanks is inspected <u>daily</u> • A schedule and procedure for assessing the condition of the tank, including detection of leaks, cracks, or wall thinning to less than minimum shell thickness • A procedure for emptying a tank to allow entry and inspection when necessary to detect corrosion or erosion of the tank sides and bottom 				
<p>F-2b(3) <u>Waste Pile Inspection</u></p> <p>The application must provide a description of the procedures to:</p> <ul style="list-style-type: none"> • Inspect liners and covers during construction and immediately after installation for: <ul style="list-style-type: none"> - Uniformity, damage, and imperfections, holes, cracks, thin spots, bulges, root holes, tight seams and joints, permeability and compaction • Remove the waste pile and periodically inspect liners for deterioration, cracks and other imperfections • Perform weekly inspections and after storms to detect: <ul style="list-style-type: none"> - Deterioration, malfunctions, or improper operation of run-on and run-off control systems - The presence of liquids in leak detection systems, where installed - Proper functioning of wind dispersal control systems, where present - The presence of leachate in and proper functioning of leachate collection and removal systems, where present 	<p>270.14(b)(5) 270.18(e) 264.254</p>			

(continued)

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p>F-2b(4) <u>Surface Impoundment Inspection</u></p> <p>The application must provide a description of how each surface impoundment, including the liner and cover systems and appurtenances for control of overtopping, will be inspected <u>weekly and after storms</u> to detect evidence of any of the following:</p> <ul style="list-style-type: none"> • Deterioration, malfunctions, or improper operation of overtopping topping control systems • Sudden drops in the level of the impoundment's contents • The presence of liquids in leak detection systems, where installed • Severe erosion or other signs of deterioration in dikes or other containment devices <p>For new facilities a description of how the liners will be inspected during construction and immediately after installation to detect nonuniformity, damages, and imperfections (holes, cracks, thin spots, bulges, root holes, tight seams and joints, permeability, and compaction).</p>	<p>270.14(b)(5) 270.17(d) 264.226(b)</p>	<p>Ref. 128</p>		
<p>F-2b(5) <u>Incinerator Inspection</u></p> <ul style="list-style-type: none"> • Incinerator and associated equipment must be inspected visually at least <u>daily</u> for leaks, spills, fugitive emissions and signs of tampering. • Emergency waste feed cut-off system and associated alarms must be tested <u>weekly</u> unless the applicant demonstrates that weekly frequency is unduly restrictive and that less frequent inspection will be adequate. At minimum operational testing must be conducted <u>monthly</u>. 	<p>264.347</p>			
<p>F-2b(6) <u>Landfill Inspection</u></p> <p>Landfill owners or operators must provide a description of procedures for:</p> <ul style="list-style-type: none"> • For new facilities, inspection of liners/covers during and immediately after installation 	<p>270.21(d) 264.15(a) 264.303</p>			

(continued)

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p>F-2b(6) (continued)</p> <ul style="list-style-type: none"> • Inspections <u>weekly and after storms</u> for <ul style="list-style-type: none"> - Operation of run-on/run-off controls - Liquids in leak detection system - Proper functioning of wind dispersal controls - Leachate in and proper operation of leachate collection/removal system 				
<p>F-2b(7) <u>Land Treatment Inspection</u></p> <p>A description of the inspection procedures. Specifically the unit must be inspected weekly and after storms for:</p> <ul style="list-style-type: none"> • Deterioration, malfunctions, or improper operation of run-on and run-off control systems • Improper functioning of wind dispersal control measures 	<p>270.20(c)(5) 264.273(g)</p>			
<p>F-2c <u>Remedial Action</u></p> <p>A description of procedures for taking remedial actions when inspections reveal problems or when problems are imminent. [These may alternately be described in the contingency plan (see 264.194(c), 264.227, 264.171)].</p>	<p>264.15(c)</p>			
<p>F-2d <u>Inspection Log</u></p> <p>A copy or description of the inspection log or summary form including the following:</p> <ul style="list-style-type: none"> • Dates and times of inspections • Name(s) of inspector(s) • Observations made • Date and nature of repairs or remedial actions taken 	<p>264.73(b)(5) 264.15(d)</p>			
<p>F-3 <u>Waiver of Preparedness and Prevention Requirements</u></p> <p>A justification of any request for a waiver of preparedness and prevention requirements of Part 264, Subpart C.</p>	<p>270.14(b)(6)</p>			

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Subject requirement	40 CFR section Nos.	References	Location in application	Comments
F-3a Equipment Requirements Unless it can be demonstrated that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below, the facility must have the following equipment: (These requirements are not specifically listed in 270.14-270.29 for inclusion in a Part B.)	264.32			
F-3a(1) Internal Communications An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel.	264.32(a)			See maps O.K.
F-3a(2) External Communications A device such as a telephone (immediately available at the scene of operations) or a handheld two-way radio, for summoning emergency assistance from local police departments, or state or local emergency response teams.	264.32(b)			see maps O.K.
F-3a(3) Emergency Equipment <ul style="list-style-type: none"> • Fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals and portable fire extinguishers) • Spill control equipment • Decontamination equipment 	264.32(c)	Ref. 30, Sec. 7; Ref. 63, Secs. 4-7, 5-4, 6-8, 8-6, 9-4; Ref. 75; Ref. 76		need Spill control equip. Contractors O.K. & Decontamination equip + generator for lights + pumps in impoundments
F-3a(4) Water for Fire Control One of the following: <ul style="list-style-type: none"> • Water at adequate volume and pressure to supply water hose streams, or • Foam-producing equipment, or • Automatic sprinklers or water spray systems 	264.32(d)			
F-3b Aisle Space Requirement Requests for a waiver of the aisle space requirement must be accompanied by a demonstration that aisle space is not needed to allow the unobstructed movement of personnel, fire protection equipment, or spill control equipment to any area of facility operation in an emergency.	264.35			

(continued)

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
F-4 <u>Preventive Procedures, Structures, and Equipment</u> A description of procedures, structures, or equipment used at the facility for the following must be included:	270.14(b)(8)			
F-4a <u>Unloading Operations</u> Prevention of hazards in unloading operations (e.g., use of ramps or special forklifts).	270.14(b)(8)(i)	Ref. 30, Sec. 7		
F-4b <u>Runoff</u> Prevention of runoff from hazardous waste handling areas to other areas of the facility or environment, or prevention of flooding (e.g., berms, dikes, trenches).	270.14(b)(8)(ii)			
F-4c <u>Water Supplies</u> Prevention of contamination of water supplies.	270.14(b)(8)(iii)			
F-4d <u>Equipment and Power Failure</u> Mitigation of effects of equipment failure and power outages.	270.14(b)(8)(iv)			
F-4e <u>Personnel Protection Equipment</u> Prevention of undue exposure of personnel to hazardous waste (e.g., protective clothing).	270.14(b)(8)(v)	Ref. 39, Ch. 2, Part 4; Ref. 62, Ch. 4-7		
F-5 <u>Prevention of Reaction of Ignitable, Reactive and Incompatible Wastes</u>				
F-5a <u>Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste</u> A description of the precautions taken by a facility that handles ignitable, reactive or incompatible waste to demonstrate compliance with 264.17 including documentation demonstrating compliance with 264.17(c). Precautions to prevent actual ignition, including separation from sources of ignition such as open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., heat producing chemical reactions), and radiant heat. Demonstration that when ignitable or reactive waste is being handled, the owner or	270.14(b)(9) 264.17(a) and (c)			

(continued)

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p>F-5a (continued)</p> <p>operator confines smoking and open flames to specially designated locations. "No Smoking" signs must be conspicuously placed wherever a hazard exists from ignitable or reactive waste.</p>				
<p>F-5b <u>General Precautions for Handling Ignitable or Reactive Waste and Mixing of Incompatible Waste</u></p> <p>A description of the precautions taken by a facility that treats, stores, or disposes of ignitable or reactive waste, or accidentally mixes incompatible waste or incompatible wastes and other materials, to prevent reactions which: (1) generate extreme heat or pressure, fire or explosions or violent reactions; (2) produce uncontrolled flammable fumes, dusts, or gases in sufficient quantities to threaten human health or the environment; (3) produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions; (4) damage the structural integrity of the device or facility; (5) by similar means threaten human health or the environment.</p> <p>Documentation to meet requirements of 264.17(a) or (b) may be based on references to published scientific or engineering literature, data from trial tests, waste analyses, or results of treatment of similar wastes by similar treatment processes and under similar operating conditions.</p>	<p>270.14(b)(9) 264.17(b) and (c)</p> <p>264.17(c)</p>	<p>Ref. 91; Ref. 92</p>		
<p>F-5c <u>Management of Ignitable or Reactive Wastes in Containers</u></p> <p>Sketches, drawings, or data demonstrating that containers of ignitable or reactive waste are located at least 15 meters (50 feet) from the facility's property line.</p>	<p>270.15(c) 264.176</p>			
<p>F-5d <u>Management of Incompatible Wastes in Containers</u></p> <p>A description of procedures to demonstrate compliance with 264.177(a) and (b) and 264.17(b) and (c).</p>	<p>270.15(d) 264.177(a)</p>			

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Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p>F-5g (continued)</p> <ul style="list-style-type: none"> • The procedures used to ensure that incompatible wastes and materials are not placed in the same container (unless 264.17(b) is complied with) or in an unwashed container that previously held incompatible waste • Dikes, berms, walls, or other devices used to separate wastes in containers, piles, open tanks, or surface impoundments 	264.177(b)			
<p>F-5e <u>Management of Ignitable or Reactive Wastes in Tanks</u></p> <p>A description of the procedures for handling incompatible, ignitable, or reactive wastes, including the use of buffer zones. 264 requirements include:</p> <ul style="list-style-type: none"> • Waste must be treated, rendered, or mixed before or immediately after placement in the tank so that it is no longer considered ignitable and complies with 264.17(b); or the waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to react or ignite; or the tank is used solely for emergencies • Facilities that treat or store ignitable or reactive waste in covered tanks must comply with the National Fire Protection Association's buffer zone requirements for tanks 	270.16(b) 264.198(a) 264.198(b)			
<p>F-5f <u>Incompatible Wastes in Tanks</u></p> <p>A statement that incompatible wastes and materials are not stored in the same tank or in an unwashed tank that previously held an incompatible waste or material (unless 264.17(b) is complied with).</p>	270.16(f) 264.199(b)			
<p>F-5g <u>Ignitable or Reactive Wastes in Waste Piles</u></p> <p>The application must include a description of the procedures for handling ignitable, or reactive wastes, including the use of buffer zones. Waste must be treated, rendered, or mixed before or immediately after placement in the waste pile so that it is no longer considered ignitable and complies with 264.17(b); or the waste is stored or treated in such a way that it</p>	270.10(g) 264.256 264.17			

(continued)

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p>F-5g (continued)</p> <p>is protected from any material or conditions that may cause the waste to react or ignite.</p>				
<p>F-5h <u>Incompatible Wastes in Waste Piles</u></p> <p>The application must include:</p> <ul style="list-style-type: none"> • A statement that incompatible wastes and materials are not stored in the same waste pile or on the same base that previously held an incompatible waste or material unless 264.17(b) is complied with • A description of the procedures (dikes, beams, walls, distances) utilized to separate a waste pile of hazardous waste that is incompatible with any waste or other material stored nearby 	264.257			
<p>F-5i <u>Ignitable or Reactive Wastes in Surface Impoundments</u></p> <p>A description of the procedures for handling ignitable, or reactive wastes, including the use of buffer zones. Waste must be treated, rendered, or mixed before or immediately after placement in the surface impoundment so that it is no longer considered ignitable and complies with §264.17(b); or the waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to react or ignite.</p>				
<p>F-5j <u>Incompatible Wastes in Surface Impoundments</u></p> <p>The application must include:</p> <ul style="list-style-type: none"> • A statement that incompatible wastes and materials are not stored in the same surface impoundment or in the impoundment that previously held an incompatible waste or material unless 264.17(b) is complied with 				
<p>F-5k <u>Ignitable or Reactive Wastes in Landfills</u></p> <p>Documentation of procedures for:</p>	270.21(f) 264.312			

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Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p>F-5k (continued)</p> <ul style="list-style-type: none"> • Rendering wastes nonreactive or ignitable prior to or immediately after placement in the landfill • Preventing reactions • Protecting ignitable wastes in containers from materials or conditions that may cause them to ignite 				
<p>F-5l <u>Incompatible Wastes in Landfills</u></p> <p>Applicant must provide procedures for:</p> <ul style="list-style-type: none"> • Insuring that incompatible wastes will not be disposed of in the same landfill cell 	<p>270.21(g) 264.313</p>			
<p>F-5m <u>Liquid Wastes in Landfills</u></p> <ul style="list-style-type: none"> • For landfills without a liner and leachate collection/removal system, method(s) used to stabilize bulk waste containing free liquids so that no free liquids remain when landfilled • Procedures for removing or stabilizing free-standing liquids in containers 	<p>270.21(h) 264.314(a)</p>			
<p>F-5n <u>Special Requirements for Containers Disposed in Landfills</u></p> <p>Documentation of procedures for ensuring that containers (except very small ones) are at least 90 percent full when placed in the landfill</p> <ul style="list-style-type: none"> • Documentation of procedures for crushing, shredding, or reducing volume of empty containers prior to landfilling • Description of procedures, containers, and materials used to ensure that lab packs comply with all requirements of 264.315 	<p>270.21(i) 264.314 264.315 264.316</p>			
<p>F-5o <u>Ignitable or Reactive Wastes in Land Treatment</u></p> <p>A description of the management of ignitable or reactive wastes which will be placed in or on the treatment zone, if applicable, and an explanation of how the following requirements will be complied with:</p>	<p>270.20(d)(7) 264.281 264.17(b)</p>			

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Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p>F-5o (continued)</p> <ul style="list-style-type: none"> The waste is immediately incorporated into the soil so that the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste and the requirements of 264.17(b) are complied with, or The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react 				
<p>F-5p <u>Incompatible Wastes in Land Treatment</u></p> <p>A description of the management of incompatible wastes must be submitted if incompatible wastes, or incompatible wastes and materials, will be placed in or the same treatment zone including an explanation of how the following requirements will be complied with:</p> <ul style="list-style-type: none"> The incompatible wastes, or incompatible wastes and materials must not place in or on the same treatment zone, unless 264.17(b) is complied with 	<p>270.20(d)(8) 265.282 264.17(b)</p>			
<p>PART 8 - CONTINGENCY PLAN</p> <p>A copy of the contingency plan required in Part 264, Subpart D. Include, where applicable, specific requirements in 264.227 and 264.255.</p>	<p>270.14(b)(7) 264.50 through 264.56</p>	<p>Ref. 36, Ch. 2; Ref. 64-68; Ref. 70; Ref. 114</p>		
<p>An existing spill prevention control plan can be amended to incorporate hazardous waste management provisions sufficient to comply with 264, Subpart D requirements.</p>	<p>264(51)(b)</p>			
<p>G-1 <u>General Information</u></p> <ul style="list-style-type: none"> Facility name and location and owner or operator name Site plan Description of facility operations 	<p>264.52</p>	<p>Ref. 36, Ch. 2</p>	<p>(95) G-1</p>	<p>OK</p>
<p>G-2 <u>Emergency Coordinators</u></p> <ul style="list-style-type: none"> Names, addresses, office and home phone numbers, and duties of primary and alternate coordinators in sequence as alternates 	<p>264.52(d) 264.55</p>	<p>Ref. 36, Ch. 2</p>	<p>G-2</p>	

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is this list in order of Primary & alternates in sequence of dismantling order, who is the Primary, must have complete addresses i.e; Vicksburg. Does S. Keen have a mailing address at Redwood.

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p>G-2 (continued)</p> <ul style="list-style-type: none"> A statement authorizing designated coordinators to commit the necessary resources to implement the contingency plan 			9(7)	<p><i>must have necessary resources to implement the Contingency plan</i></p>
<p>G-3 Implementation</p> <p>Criteria for implementation of contingency plan for any potential emergency</p> <ul style="list-style-type: none"> Fires/explosions Unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water 	<p>264.52(a)</p> <p>264.56(d)</p>	<p>Ref. 64; Ref. 65; Ref. 68</p>		<p><i>Have a statement</i></p>
<p>G-4 Emergency Response Procedures</p>				
<p>G-4a Notification</p> <p>Methodology for immediate notification of facility personnel and necessary state or local agencies.</p>	264.56(a)	Ref. 64; Ref. 68	Part 3	OK.
<p>G-4b Identification of Hazardous Materials</p> <p>Available data and/or procedures for identification of hazardous materials involved in the emergency and quantity and areal extent of release. Include information on:</p> <ul style="list-style-type: none"> Characteristics of waste Exact source Amount Areal extent of release 	264.56(b)	Ref. 36, Ch. 2; Ref. 69	11	<p><i>use inspection log sheets for contents + amounts</i></p>
<p>G-4c Hazard Assessment</p> <ul style="list-style-type: none"> Procedure for assessment of possible hazards to the environment and human health Procedure for determining the need for evacuation and notification of authorities. The authorities to be notified must include the On-Scene-Coordinator for that area or the National Response Center 	<p>264.56(c)</p> <p>264.56(d)</p>	<p>Ref. 30; Ref. 36, Ch. 2; Ref. 60; Ref. 61; Ref. 64; Ref. 68; Ref. 70, Ch. 1</p>	Part 3	OK.
<p>G-4d Control Procedures</p> <ul style="list-style-type: none"> Specific responses and control procedures to be taken in the event of a fire, explosion, or release of hazardous waste to air, land, or water 	264.52(a)	<p>Ref. 33; Ref. 34; Ref. 36, Ch. 2; Ref. 44, Ch. 4; Refs. 64-68; Ref. 70; Ref. 71; Ref. 72</p>		

(continued)

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p>G-4e <u>Prevention of Recurrence or Spread of Fires, Explosions, or Releases</u></p> <p>During an emergency situation, a description of the necessary steps to be taken to ensure that fires, explosions, or releases do not occur, reoccur, or spread to other hazardous waste at the facility. Steps must include, where applicable:</p> <ul style="list-style-type: none"> • Shut-down of processes and continued monitoring of them • Collecting, containing, and treating released wastes • Removing and isolating containers • Proper use of fire control structures (e.g., fire doors), systems (e.g., sprinkler systems), and equipment (e.g., extinguishers) 	<p>264.56(e)</p> <p>Guidance</p>	<p>Ref. 36, Ch. 2; Ref. 71; Ref. 73; Ref. 74</p>		<p><i>Safe verification what the reg says. It should read the facility will do these things</i></p> <p><i>maybe ok. if they change "must" to "will". Does say "will" in contingency plan!</i></p>
<p>G-4f <u>Storage and Treatment of Released Material</u></p> <ul style="list-style-type: none"> • Provisions to monitor for leaks, pressure buildup, gas generation, or ruptures as appropriate if operations at the facility are stopped in response to a release, fire or explosion • Provisions for treatment, storage, or disposal of any hazardous waste resulting from a release, fire, or explosion at the facility • Equipment available • Procedures for deployment of these resources • Methods to contain, treat, and clean up a hazardous release and decontaminate the affected area 	<p>264.56(f) 264.56(g)</p> <p>Guidance Guidance Guidance</p>	<p>Ref. 41, Ch. 3 and 4</p>		<p><i>Tap out R A. & all 40CFR.</i></p>
<p>G-4g <u>Incompatible Waste</u></p> <p>Provisions for prevention of incompatible waste from being treated, stored, or located in the affected areas until cleanup procedures are completed.</p>	<p>264.56(h)(1)</p>	<p>Ref. 36, Ch. 2</p>		
<p>G-4h <u>Post-Emergency Equipment Maintenance</u></p> <p>Procedures for ensuring that all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed. (This includes advising authorities)</p>	<p>264.56(h)(2)</p> <p>264.56(i)</p>	<p>Ref. 36, Ch. 2</p>		<p><i>Emergency. need to notify P&R equip. in a working order</i></p>
<p>G-4i <u>Container Spills and Leakage</u></p> <p>Procedures for responding to container spills or leakage including removal of</p>	<p>264.56(g) 264.171</p>			<p><i>MA</i></p>

(continued)

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p>G-4i (continued)</p> <p>spilled waste and repair or replacement of containers.</p>				
<p>G-4j Tank Spills and Leakage</p> <p>Procedures for responding to tank spills or leakage including removal of spilled waste and repair of tank.</p>	<p>264.56(g) 264.194(c)</p>	<p>Ref. 7B</p>		
<p>G-4k Waste Pile Spills and Leakage</p> <p>The application must describe the procedures to be used when responding to waste pile spills and leakage:</p> <ul style="list-style-type: none"> • Notify Regional Administrator if liquids are detected in a leak detection system • Procedures and criteria for identifying removing accumulated liquids, repairing or replacing the liner(s) • Obtain qualified engineer certification of repairs and probability of leakage • Procedures and criteria for enacting groundwater detection, compliance, and corrective action programs • Procedures and criteria which will be used if an inspectable liner is found to be deteriorating, cracking or defective 	<p>270.14(b)(7) 264.252 264.253</p>			<p><i>I guess spills will drain to impoundment + will follow control procedures</i></p>
<p>G-4l Surface Impoundments Spills, Leakage and Sudden Drops</p> <p>The application must describe the procedures to be used when responding to surface impoundment spills and leakage:</p> <ul style="list-style-type: none"> • Procedures for notifying Regional Administrator if liquids are detected in a leak detection system • Procedures and criteria for identifying and removing accumulated liquids, repairing or replacing the liner(s) • Procedures and criteria for enacting groundwater detection, compliance, and corrective action programs • Procedures for stopping waste additions • Procedures for stopping leaks and preventing sudden drops and preventing catastrophic failure • Procedures and criteria for emptying impoundment 	<p>270.14(b)(7) 264.222 264.227</p>			

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
G-41 (continued) <ul style="list-style-type: none"> • Obtain qualified engineers certification of repairs and probability of leakage or failure 				
G-4m <u>Landfill Leakage</u> G-4m(1) <u>Liner Repair and Replacement</u> For double-lined landfills with leak detection systems when liquid is detected in the system: <ul style="list-style-type: none"> • Procedures to notify the Regional Administrator within 7 days • Procedures to remove accumulated liquid • Procedures to repair or replace the facility liner • Obtain certification from a qualified engineer that the leak has been stopped. 	264.302(b)(1) 264.302(b)(2) (1)	Ref. 138		
G-4m(2) <u>Detection Monitoring Program</u> If liquid is detected in the leak detection system and a detection monitoring program is established as a permit condition: <ul style="list-style-type: none"> • Procedures that will be taken by the landfill owner or operator to implement the detection monitoring program 	264.302(b)(2) (1)			
G-5 <u>Emergency Equipment</u> Location, description, and capabilities of emergency equipment. This should include: <ul style="list-style-type: none"> • Spill control equipment • Fire control equipment • Personnel protective items such as respirators and protective clothing • First aid and medical supplies • Emergency decontamination equipment • Emergency communication and alarm systems 	264.52(e)	Ref. 30; Ref. 36, Ch. 2; Ref. 62, Ch. 5; Ref. 41; Ref. 75; Ref. 76		<i>not necessary</i> <i>not complete - size + type fire extinguishers. List of first aid supplies.</i> <i>contractor provide spill control equip. (sponge absorbents)</i>
G-6 <u>Coordination Agreements</u> • A description of coordination agreements with local police and fire departments, hospitals, contractors, and state and	264.37 264.52(c)	Ref. 36, Ch. 2		<div style="border: 1px solid black; padding: 5px;"> <i>copies have not been sent to any one. must be sent</i> </div>

(continued)

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p>B-6 (continued)</p> <p>local emergency response teams to familiarize them with the facility and actions needed in case of emergency</p> <ul style="list-style-type: none"> • A statement indicating that a copy of the contingency plan has been submitted to these organizations • If applicable, documentation of refusal to enter into a coordination agreement 	<p>264.53(b)</p> <p>264.37(b)</p>			
<p>B-7 <u>Evacuation Plan</u></p> <p>The plan must include:</p> <ul style="list-style-type: none"> • Criteria for evacuation • A description of signal(s) to be used to begin evacuation • Primary and alternate evacuation routes 	<p>264.52(f)</p>	<p>Ref. 36, Ch. 2</p>		<p><i>Say "do not need"</i> <i>If impoundment or Tank w/ non ignitable, this may be the case</i></p>
<p>B-8 <u>Required Reports</u></p> <ul style="list-style-type: none"> • Provisions for submission of reports of emergency incidents within 15 days of occurrence • Notation of such incidents in the operating record identifying the time, date, and details of these emergency incidents 	<p>264.56(j)</p>	<p>Ref. 36, Ch. 2</p>		
<p>PART H - PERSONNEL TRAINING</p>	<p>270.14(b)(12)</p> <p>264.16</p>	<p>Ref. 77; Ref. 70</p>		
<p>H-1 <u>Outline of Training Program</u></p> <p>An outline of both the introductory and continuing training programs by owners or operators to prepare the personnel to operate and maintain the facility in a safe manner as required to demonstrate compliance with 264.16. Include a brief description of how training will be designed to meet actual job tasks in accordance with requirements in 264.16(e)(3). (Note: On-the-job training may be used to comply with these requirements.)</p>	<p>270.14(b)(12)</p>			
<p>H-1a <u>Job Titles and Duties</u></p> <p>For each employee whose position at the facility is related to hazardous waste management, the following must be maintained at the facility:</p> <ul style="list-style-type: none"> • Job title • Job duties • Job description 	<p>264.16(d)(1)</p> <p>264.16(d)(2)</p>	<p>Ref. 77</p>		<p><i>need requisite skills & educational qualifications for the positions.</i></p>

(continued)

Subject requirement	40 CFR section Nos.	References	Location in application	Comments
<p>N-1b Training Content, Frequency, and Techniques</p> <p>In both introductory and continuing training (including an annual review of the initial training) for each employee describe:</p> <ul style="list-style-type: none"> • Training content • Frequency of training • Technique(s) used in training 	264.16(d)(3) 264.16(c)	Ref. 77		will begin training 2-15-84
<p>N-1c Training Director</p> <p>Demonstration that the program is directed by a person trained in hazardous waste management.</p> <ul style="list-style-type: none"> • Credentials of training director 	264.16(a)(2)	Ref. 77		check records at the facility. annually OK.
<p>N-1d Relevance of Training to Job Position</p> <p>A brief description of how instructions of facility personnel in hazardous waste management procedures (including contingency plan implementation) is relevant to their positions. [To demonstrate compliance with 264.16(a)(2).]</p>	264.16(a)(2)	Ref. 77, Ch. 5		
<p>N-1e Training for Emergency Response</p> <p>Documentation that the training program trains facility personnel to respond effectively to emergencies and trains them to be familiar with emergency procedures, emergency equipment, and emergency systems, include where applicable:</p> <ul style="list-style-type: none"> • Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment • Key parameters for automatic waste feed cutoff systems • Communications or alarm systems • Response to fires or explosions • Response to groundwater contamination incidents • Shutdown of operations 	264.16(a)(3)	Ref. 77		need Procedures for using, inspecting, repairing, & replacing facility emerg. + monitoring equip.
<p>N-2 Implementation of Training Program</p> <ul style="list-style-type: none"> • Indication that training has been and will be successfully completed by facility personnel within 6 months of their employment or assignment to a facility, or transfer to a new position at a facility, 	264.16(d)(4) 264.16(b)	Ref. 77		Say annually, no newly hired personnel must work unsupervised for 6 mos. of their employment.

(continued)

Subject requirement	40 CFR section Nos.	Location in application	Comments
H-1e (continued),			
<ul style="list-style-type: none"> • Key parameters for automatic waste feed cutoff systems • Communications or alarm systems • Response to fires or explosions • Response to groundwater contamination incidents • Shutdown of operations 	264.16(a)(3) (ii) 264.16(a)(3) (iii) 264.16(a)(3) (iv) 264.16(a)(3) (v) 264.16(a)(3) (vi)		
H-2 <u>Implementation of Training Program</u>	264.16(d)(4) 264.16(h)		
<ul style="list-style-type: none"> • Indication that training has been and will be successfully completed by facility personnel within 6 months of their employment or assignment to a facility, or transfer to a new position at a facility, whichever is later. (Note: employees hired after the effective date of these regulations must not work in unsupervised positions until they have completed the training requirements.) • Records documenting that the required training has been given to and completed by facility personnel must be maintained 			
PART I - CLOSURE PLANS, POSTCLOSURE PLANS, AND FINANCIAL REQUIREMENTS	270.14(b)(13); 270.14(b)(15) 270.14(b)(16) 270.14(b)(17) 270.14(b)(18) 264.110- 264.115, 264.351, 264.178, 264.197 264.258 264.278 264.280 264.310		
I-1 <u>Closure Plans</u>			
A copy of the written closure plan required by 264.112 and consistent with items I-1a through I-1f.	270.14(b)(13)	I-1	
Where applicable, the specific requirements in 264.178, 264.197, 264.278, 264.258, 264.280, 264.310, and 264.351, must be included.			

(continued)

Subject, requirement	40 CFR section Nos.	Location in application	Comments
<p>1-1a Closure Performance Standard</p> <p>A description of how closure</p> <ul style="list-style-type: none"> Minimizes the need for postclosure maintenance Minimizes or eliminates releases of hazardous wastes, hazardous waste constituents, leachate, and contaminated rainfall to the air, groundwater, surface water, and surrounding land 	<p>264.111 (264.112 requires consistency with 264.111)</p>	<p>I-1 I-1</p>	<p>OK OK</p>
<p>1-1b Partial Closure and Final Closure Activities</p> <p>Fully describe the time and all activities required for:</p> <ul style="list-style-type: none"> Partial closure, if applicable Final closure Maximum extent of operation which will be active during life of facility <p>Description must identify how requirements of 264.111, 264.113, 264.114, 264.115 and applicable requirements of 264.178, 264.197, 264.228, 264.258, 264.280, 264.310, and 264.351 will be met.</p>	<p>264.112(a)(1) (264.112(a)(1) through 264.112(a)(4) outline minimum acceptable plan elements)</p>	<p>N/A</p>	
<p>1-1c Maximum Waste Inventory</p> <p>A description of the maximum inventory of wastes that could be in storage, treatment and disposal at any time during the life of the facility.</p>	<p>264.112(a)(2)</p>		<p>Not in plan Basis for closure</p>
<p>1-1d Schedule for Closure</p> <p>A schedule for final closure including:</p> <ul style="list-style-type: none"> Estimated expected year of closure Closure schedule with total time to close, time for intervening closure activities, and inspection schedule during closure 	<p>264.112(a)(4)</p>	<p>I-1</p>	<p>Aug. 19, 1988 No schedule is in this plan. Must be included in plan. Last page of I-1</p>
<p>1-1d(1) Time Allowed for Closure</p> <p>The schedule for closure must show</p> <ul style="list-style-type: none"> All hazardous wastes will be treated, removed off-site, or disposed of on-site within 90 days from receipt of final volume of waste All closure activities will be completed within 180 days from receipt of final volume of waste 	<p>264.113(a) and (b)</p>	<p>I-1</p>	<p>Not addressed in plan OK or</p>

(continued)

Subject requirement	40 CFR section Nos.	Location in application	Comments
<p>1-1d(1)(a) Extensions for Closure time</p> <p>A petition made to the Regional Administrator for a schedule for closure which exceeds the 90 days for treatment, removal, or disposal of wastes and/or the 180 days for completion of closure activities made to the Regional Administrator. One of the following must be demonstrated:</p> <ul style="list-style-type: none"> • Closure activities require longer than 180 days (or facility has capacity to receive additional wastes). • There is a reasonable likelihood that a person other than owner or operator will recommence operation of the site • Closure would be incompatible with continued operation <p>Demonstrate that all steps have and will be taken to prevent threats to human health and environment from unclosed but inactive facility.</p>	<p>264.113(a) 264.113(b)</p>	<p>N/A</p>	
<p>1-1e Inventory Disposal, Removal or Decontamination of Equipment</p> <p>A description of how all facility equipment and structures will be decontaminated or disposed of when closure is completed. The following should be included:</p> <ul style="list-style-type: none"> • Decontamination procedures • Criteria for determining contamination • List equipment • Disposal of contaminated soil • Decontamination of clean up materials, equipment, and residues • Demonstrate decontamination has been effective 	<p>264.114</p> <p>Guidance Guidance Guidance Guidance Guidance</p>	<p>I-1 I-1 I-1 I-1</p>	<p>OK OK OK OK Not in plan.</p>
<p>1-1e(1) Closure of Containers</p> <p>A description of how at closure, all hazardous waste residues will be removed from the containment system, and how remaining containers, bases, and soil containing or contaminated</p>	<p>264.178</p>	<p>N/A</p>	

(continued)

Subject requirement	49 CFR section Nos.	Location in application	Comments
<p>1-1e(1) (continued)</p> <p>with hazardous waste or hazardous waste residues will be decontaminated or removed.</p> <ul style="list-style-type: none"> • Hazardous waste removal and disposal • Container decontamination and disposal • Site decontamination and disposal including linings, soil, and washes • Verification of decontamination • Maximum inventory <p>The description should address the following:</p>	<p>Guidance Guidance Guidance Guidance Guidance</p>		
<p>1-1e(2) Closure of Tanks</p> <p>A description of how at closure, all hazardous waste residues will be removed from tanks, discharge control equipment, and discharge confinement structure, and the facility will be decontaminated. The description should address the following:</p> <ul style="list-style-type: none"> • Waste removal from tanks and equipment • Decontamination of all components • Verification of decontamination • Disposal of wastes and residues • Maximum inventory 	<p>264.197</p> <p>Guidance Guidance Guidance Guidance</p>	<p>N/A</p>	
<p>1-1e(3) Closure of Waste Piles (Reserved)</p> <p>The application must describe how all hazardous waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate will be removed or decontaminated at closure and managed as hazardous waste. If any wastes, waste residues or contaminated materials or soils will remain after closure, provide plans for closing the pile as a landfill [1-1f(6)] and provide postclosure plan [1-2]. Piles without liners or with liners that do not meet the requirements of D-3e must also provide contingent plans for closing the facility as a landfill</p>	<p>270.17(1) 264.258</p>	<p>N/A</p>	

(continued)

Subject requirement	49 CFR section Nos.	Location in application	Comments
<p>1-1e(3) (continued)</p> <p>{1-1d(6)} and a contingent post-closure {1-2}, except for dry, enclosed piles meeting the requirements of D-3b or piles for which a liner exemption is sought in accordance with D-3c.</p> <ul style="list-style-type: none"> • Procedure and criteria for determining whether or not decontamination has been successful • Sampling and analytical techniques • Continuance of treatment during closure (if appropriate) 	<p>Guidance</p> <p>Guidance</p> <p>Guidance</p>		
<p>1-1e(4) <u>Closure of Surface Impoundments</u></p> <p>A description of how all hazardous waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate will be removed or decontaminated at closure and managed as hazardous waste. If any wastes, waste residues or contaminated materials or soils will remain after closure, provide plans for closing the surface impoundment as landfill {1-1e(6)} and provide post-closure plans {1-2}. Surface impoundments without liners or with liners that do not meet the requirements of D-4d must also provide contingent plans for closure as a landfill {1-1e(6)} and a contingent post-closure plan {1-2}, except for impoundments requesting a liner exemption in accordance with D-4b.</p> <ul style="list-style-type: none"> • Procedure and criteria for determining whether or not decontamination has been successful • Sampling and analytical techniques • Continuance of treatment during closure (if appropriate) 	<p>270.17(a) 264.27A</p> <p>Guidance</p> <p>Guidance</p> <p>Guidance</p>	<p>I-1</p>	<p>NEED TO ADDRESS OTHER CONTAMINATED STRUCTURES AND EQUIPMENT SUCH AS PIPING, PUMPS, HOSES AND SO ON.</p> <p>NOT IN PLAN</p> <p>" " "</p> <p>N/A</p>
<p>1-1e(5) <u>Closure of Incinerators</u></p> <p>Description of how at closure all hazardous residues will be removed from the incinerator, associated ductwork, piping, air pollution control</p>	<p>264.351</p>	<p>N/A</p>	

(continued)

Subject, requirement	40 CFR section Nos.	Location in application	Comments
<p>I-1e(5) (continued)</p> <p>equipment, sumps, and any other structures or operating equipment such as pumps, valves, etc., that have come into contact with the hazardous waste. Alternatively, a description of how the incinerator and associated units and equipment will be dismantled and disposed of as a hazardous waste will suffice.</p>			
<p>I-1e(6) <u>Closure of Landfills</u></p> <p>Provide detailed plans and an engineering report which describes the final cover components in detail. These detailed plans and engineering report must describe how the final cover will:</p> <ul style="list-style-type: none"> • Provide long-term minimization of migration of liquids through closed landfill • Function with minimum maintenance • Promote drainage and minimize erosion/abrasion • Settle/subside without losing integrity • Be less permeable than bottom liners or subsoils 	<p>270.21(e) 264.310(a)</p>	<p>N/A</p>	
<p>I-1e(7) <u>Closure of Land Treatment</u></p> <p>During closure of land treatment facilities the owner or operator must comply with the following:</p> <ul style="list-style-type: none"> • Continued all operations (including pH control) necessary to maximize degradation, transformation, or immobilization of hazardous constituents within the treatment zone as required, except to the extent such measures are inconsistent with 264.200(a)(8) • Continue all operations in the treatment zone to minimize run-off of hazardous constituents • Maintain the run-on control system • Maintain the run-off management system • Control wind dispersal of hazardous waste if required 	<p>270.20(f) 264.200(a) 264.700(b)</p>	<p>N/A</p>	

(continued)

Subject requirement	40 CFR section Nos.	Location in application	Comments
<p>1-1e(7) (continued)</p> <ul style="list-style-type: none"> • Continue to comply with any prohibitions or conditions concerning growth of food-chain crops • Continue unsaturated zone monitoring except that soil-pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone • Establish a vegetative cover on the portion of the facility being closed at such time that the cover will not substantially impede degradation, transformation, or immobilization of hazardous constituents in the treatment zone. The vegetative cover must be capable of maintaining growth without extensive maintenance <p>When closure is complete the owner or operator may submit to the Regional Administrator certification by an independent qualified soil scientist, in lieu of an independent registered professional engineer, that the facility has been closed in accordance with the specifications in the approved closure plan.</p>		N/A	
<p>1-2 Post-Closure Plan</p> <p>1-2a Post-Closure Plan</p> <p>An owner or operator of a disposal facility must have a written post-closure plan. A copy of the approved plan and all revisions to the plan must be kept at the facility until the postclosure care begins. The plan must include the following:</p> <ul style="list-style-type: none"> • Description of groundwater monitoring activities and frequencies • Description of maintenance activities and frequencies for: <ul style="list-style-type: none"> - Final containment structures - Facility monitoring equipment - Security devices - Erosion damage - Vegetative cover - Run-on run-off control systems - Leachate collection, detection, and removal systems 	<p>270.14(b)(13) 270.17(g) 270.18(i) 270.20(f) 270.21(e) 264.117 264.118(a) 264.228(h) 264.228(c) 264.280(c) 264.310(h) Guidance</p>	<p>F-3 I-1</p>	<p>did NOT address detail enough in plan.</p>

(continued)

Subject, requirement	40 CFR section Nos.	Location in application	Comments
<p>1-2a (continued)</p> <ul style="list-style-type: none"> - Gas venting system - Groundwater monitoring system (saturated and/or unsaturated) - Fugitive dust control system - Erosion prohibitions - pH control <ul style="list-style-type: none"> • Location(s) and number of copies of post-closure plan • Identification and location (address and phone number) of person responsible for storage and updating of facility copy of post-closure plan prior to closure • Identification and location (address and phone number) of person responsible for storage and updating facility copy of post-closure plan during post-closure period • Procedure for updating all other copies of post-closure plan 	<p>264.118(a)(3)</p> <p>Guidance</p>	<p>I-1</p> <p>I-1</p>	<p>OK</p> <p>NOT in plan.</p> <p>ADDRESSED only partial information.</p> <p>OK</p>
<p>1-2b Contingent Post-Closure Plans</p> <p>If surface impoundments or waste piles without approved liner systems or exemptions from liner requirements are utilized and the owner/operator intends to remove all wastes and contamination, the application must include a contingent post-closure plan. The requirements of the contingent post-closure plan are identified to the post-closure plan required for landfills (see 1-2a).</p>	<p>270.17(g) 270.18(i) 264.270(c)(1) 264.258(b) 264.258(c)</p>	<p>N/A</p>	
<p>1-2c Specific Post-Closure Plan Requirements</p> <p>Items 1-2c(1) through 1-2c(4) present specific post-closure plan requirements for surface impoundments, waste piles, land treatment facilities and landfills.</p>			
<p>1-2c(1) Surface Impoundments</p> <p>For an owner or operator of a surface impoundment closed with wastes in place, the post-closure plan must include:</p> <ul style="list-style-type: none"> • Procedures for maintenance and repair of final cover • Procedures for maintenance and monitoring of leak detection system • Procedures for maintenance and monitoring of groundwater monitoring system 	<p>270.17(a) 264.118 264.270(c)(1)</p>	<p>E-3</p>	<p>E- COMPLETE</p> <p>N/A</p> <p>E- COMPLETE</p>

(continued)

Subject requirement	40 CFR section Nos.	Location in application	Comments
<p>1-2c(1) (continued)</p> <ul style="list-style-type: none"> • Procedures for compliance with Subpart F • Procedures for preventing run-on/run-off final cover damage 			<p><i>INCOMPLETE</i> <i>INCOMPLETE, MOOR DETAIL VERBASE AND DRAWINGS ABOUT HANDLING RUN-ON, RUNOFF DRAINAGE.</i></p>
<p>1-2c(2) <u>Waste Piles</u></p> <p>For an owner or operator of a waste pile closed with wastes in place, the post-closure plan must include the same items as for a landfill including:</p> <ul style="list-style-type: none"> • Procedures for maintenance and repair of final cover • Monitoring and maintenance procedures for leak detection system • Procedure for leachate collection/removal system operation • Procedures to maintain and monitor groundwater monitoring system • Procedures for compliance with Subpart F • Procedures for preventing final cap erosion due to run-on and run-off • Procedures for protection and maintenance of benchmarks • Procedures to be undertaken if liquid is found in leak detection system 	<p>270.10(i) 264.110 264.258(b)</p> <p>264.310(c)</p>	<p>N/A</p>	
<p>1-2c(3) <u>Landfills</u></p> <p>An owner or operator of a landfill must include the following in the post-closure plan:</p> <ul style="list-style-type: none"> • Procedures for maintenance and repair of final cover • Monitoring and maintenance procedures for leak detection system • Procedure for leachate collection/removal system operation • Procedures to maintain and monitor groundwater monitoring system • Procedures for compliance with Subpart F • Procedures for preventing final cap erosion due to run-on and run-off • Procedures for protection and maintenance of benchmarks • Procedures to be undertaken if liquid is found in leak detection system 	<p>270.21(e) 264.110 264.280(c) 264.310(b)</p> <p>264.310(c)</p>	<p>N/A</p>	

(continued)

Subject requirement	40 CFR section Nos.	Location in application	Comments
<p>1-2c(4) Land Treatment Facilities</p> <p>An owner or operator of a land treatment facility must include the following in the post-closure plan:</p> <ul style="list-style-type: none"> • Procedures to enhance degradation of wastes in treatment zone • Procedure for maintaining vegetative cover • Procedure for maintaining run-on controls • Procedure for maintaining run-off controls • Procedures for wind dispersal control • Procedures to ensure compliance with food-chain crop prohibitions • Procedures for unsaturated zone monitoring 	<p>270.20(d)(6) 264.118 264.210(c)</p>	<p>N/A</p>	
<p>1-3 Notices Required for Disposal Facilities</p> <p>1-3a Notice to Local Land Authority</p> <p>Documentation by applicant that within 90 days after closure a survey plat indicating location and dimensions of landfill cells or other disposal areas with respect to permanently surveyed benchmarks, along with a record of the type, location and quantity of hazardous waste within each cell or disposal area will be submitted to the appropriate local land use authority and to the Regional Administrator.</p>	<p>264.119</p>		<p><i>NOT SPECIFIC ENOUGH.</i></p>
<p>1-3b Notice in Deed to Property</p> <p>Documentation by applicant that he has or will record a notation on the facility deed, or other instrument examined during a title search, that notifies any potential purchaser of the property that:</p> <ul style="list-style-type: none"> • The property has been used to manage hazardous wastes • Use of the land is restricted to activities that will not disturb integrity of final cover system, or monitoring system during post-closure care period • Requirements stated under 1-3a above has been complied with 	<p>270.10(b)(14) 264.120</p>		<p><i>NOT SPECIFIC ENOUGH.</i></p>

(continued)

Subject requirement	40 CFR section Nos.	Location in application	Comments
<p>1-4 Closure Cost Estimate</p> <p>A copy of the most recent closure or contingent closure cost estimate, prepared in accordance with 264.142.</p> <ul style="list-style-type: none"> • Cost estimate • Fully loaded • No salvage credits • Current year costs • Cost adjusted annually from anniversary date of first cost estimate • Based on point in operating life when extent and manner of operation would make closure most expensive. 	<p>270.14(h)(15)</p> <p>264.142 Guidance Guidance 264.142(a) 264.142(h)</p> <p>264.142(a)</p>		<p><i>NOT PREPARED IN</i></p>
<p>1-5 Financial Assurance Mechanism for Closure</p> <p>A copy of the established financial assurance mechanism for facility closure adopted in compliance with 264.143. The mechanism must be one of the following (1-5(a) through 1-5(f)) and include due dates and use standard wording.</p>	<p>270.14(h)(15) 264.143 264.151</p>	<p><i>I-2</i></p>	<p><i>OK</i></p>
<p>1-5a Closure Trust Fund</p> <p>A copy of the closure trust fund agreement with the wording required in 264.151(a)(1) and a formal certification of acknowledgment.</p> <ul style="list-style-type: none"> • Bank or approval institution • Mechanics <ul style="list-style-type: none"> - Pay-in period; life of permit or remaining life of facility, whichever is shorter - Annual payment; unfunded liability divided by years left in pay-in period 	<p>264.143(r) 264.151(a)(1)</p>	<p><i>I-2</i></p>	<p><i>OK</i></p> <p><i>OK</i></p> <p><i>OK</i></p>
<p>1-5b Surety Bond</p> <p>A surety bond from a federally acceptable surety company meeting one of the following requirements:</p> <ul style="list-style-type: none"> • Surety bond guaranteeing payment into a closure trust fund. A copy of the surety bond with the wording required in 264.151(b), a copy of the standby trust fund agreement • Surety bond guaranteeing performance of closure. A copy of the surety bond with the wording required in Part 264.151 	<p>264.143(b) 264.151(b)</p> <p>264.143(b)</p> <p>264.143(c)</p>	<p><i>N/A</i></p>	

(continued)

Subject requirement	40 CFR section Nos.	Location in application	Comments
1-5b (continued) ¹			
(c), guaranteeing that the owner or operator will perform closure according to the closure plan and the requirements of Subpart H			
1-5c Closure Letter of Credit	264.141(d) 264.151(d)	N/A	
A copy of a closure letter of credit with the wording required in 264.151(d).			
<ul style="list-style-type: none"> • Irrevocable letter of credit • At least one year period, automatic renewal • Standby trust fund • Amount reflects current cost estimate 			
1-5d Closure Insurance	264.151(e)		
To demonstrate that the owner or operator has closure insurance, he or she must submit to the Regional Administrator 60 days before hazardous waste is received a certificate of insurance worded as specified in 264.151(e).			
<ul style="list-style-type: none"> • Noncancellable policy, automatic renewal • Insurer licensed or eligible surplus lines carrier • Certificate of insurance • Funds available whenever final closure occurs 			<i>MUST MEET MINIMUM STANDARD REQUIREMENTS.</i>
1-5e Financial Test and Corporate Guarantee for Closure	264.143(f) 264.151(f) 264.151(h)	N/A	
To demonstrate that this test is met, an owner or operator must submit a letter signed by the company's chief financial officer that is worded as specified in 264.151(f) and meets the following criteria:			
<ul style="list-style-type: none"> • Tangible net worth \$10 million • Tangible net worth 6 x all closure and post-closure costs • U.S. assets at least 90% of total assets or at least six times all closure and post-closure costs • Bond rating requirement or alternative financial ratio tests • Application must include; 			

(continued)

Subject requirement	40 CFR section Nos.	Location in application	Comments
<p>1-5e (continued) :</p> <ul style="list-style-type: none"> - Copy of a report on the company's latest financial statements drafted by an independent certified public accountant (CPA) - Copy of a report from the owner's or operator's independent CPA to the owner or operator stating that he or she has examined the data in the letter from the chief financial officer and that it is consistent with the amounts in the independently-audited year-end financial statements for the latest fiscal year and that no matters came to attention to cause him to believe that the data should be adjusted <p>In lieu of the above items, the owner or operator may submit a corporate guarantee worded as required by 264.151(h). This guarantee provides that the guarantor, which must be the parent company of the owner or operator, will perform final closure in accordance with the closure plan if the owner or operator fails to do so or will establish a closure trust fund for the owner or operator. A copy of these items should be submitted with the Part B for review by the permit writer.</p>	264.143(f)(10)		
<p>1-5f <u>Combinations</u></p> <p>1-5f(1) <u>Use of Multiple Financial Mechanisms</u></p> <p>A copy of a combination of trust fund agreements, surety bond guaranteeing payment into a closure trust fund or letters of credit, insurance, and state assumption of responsibility, which provide financial assurance for the amount of closure. Combined financial assurance must be at least equal to the adjusted closure cost estimate. Financial assurance instruments must meet requirements of 264.143(a),(b),(d), or (e) which include closure trust fund, surety bond guaranteeing payment into a closure trust fund, closure letter of credit, and closure insurance, respectively.</p>	264.143(g) 264.149	N/A	
<p>1-5f(2) <u>Use of Financial Mechanism for Multiple Facilities</u></p> <p>A copy of a financial assurance mechanism for more than one facility showing for</p>	264.143(h)	N/A	

(continued)

Subject requirement	40 CFR section Nos.	Location in application	Comments
<p>1-5f(2) (continued)</p> <p>each facility, the EPA ID number, name, address, and amount of closure funds assured by the mechanism. Total funding must be no less than the sum required for each facility considered separately. Documents must be submitted to each Region where facilities are located. Financial test applies to sum of closure and post-closure costs for all facilities.</p>			
<p>1-6 Post-Closure Cost Estimate</p> <p>If landfill, land treatment, surface impoundments, or waste piles are utilized, the application must include a post-closure or a contingent post-closure cost estimate prepared in accordance with 264.144.</p> <ul style="list-style-type: none"> • Fully loaded labor rate • No salvage values • No operation credits (gas, crops, livestock) • Current year • Based on the extent of operation most likely to make postclosure most expensive • Inspection costs • Administration • Transportation 	<p>270.14(b)(16) 264.144</p> <p>Guidance Guidance Guidance Guidance Guidance Guidance Guidance Guidance</p>	<p>I-2</p>	<p>INCOMPLETE</p> <p>Missing " " " " " " "</p>
<p>1-7 Financial Assurance Mechanism for Post-Closure</p> <p>A copy of the established financial assurance mechanism for post-closure care adopted in compliance with 264.145. The mechanism must be one of the following (1-7(a) through 1-7(f)) and include due dates and use standard wording.</p>	<p>270.14(b)(16) 264.145 264.151</p>		
<p>1-7a Post-closure Trust Fund</p> <p>A copy of the post-closure trust fund agreement with the wording required in 264.151(a)(1) and a formal certification of acknowledgment.</p> <ul style="list-style-type: none"> • Bank or approval institution • Mechanics <ul style="list-style-type: none"> - Pay-in period; life of permit or remaining life of facility, whichever is shorter - Annual payment; unfunded liability divided by years left in pay-in period 	<p>264.145(a) 264.151(a)(1)</p>	<p>I-2</p>	<p>OK</p> <p>OK</p> <p>OK</p> <p>OK</p>

(continued)

Subject, requirement	40 CFR section Nos.	Location in application	Comments
<p>1-7b Surety Bond</p> <p>A surety bond from a federally acceptable surety company meeting one of the following requirements:</p> <ul style="list-style-type: none"> • Surety bond guaranteeing payment into a post-closure trust fund. A copy of the surety bond with the wording required in 264.151(b), a copy of the standby trust fund agreement • Surety bond guaranteeing performance of post-closure activities. A copy of the surety bond with the wording required in Part 264.151(c), guaranteeing that the owner or operator will perform post-closure activities according to the post-closure plan and the requirements of Subpart H 	<p>264.145(b) and (c) 264.151(b) 264.151(c)</p> <p>264.145(b)</p> <p>264.145(c)</p>	N/A	
<p>1-7c Post-closure letter of Credit</p> <p>A copy of postclosure letter of credit with the wording required in 264.151(d)</p> <ul style="list-style-type: none"> • Irrevocable letter of credit • At least one year period, automatic renewal • Standby trust fund • Amount reflects current cost estimate 	<p>264.145(c) 264.151(f)</p>	N/A	
<p>1-7d Post-closure Insurance</p> <p>To demonstrate that the owner or operator has post-closure insurance, he or she must submit to the Regional Administrator 60 days before hazardous waste is received a certificate of insurance worded as specified in 264.151(e).</p> <ul style="list-style-type: none"> • Noncancellable policy, automatic renewal • Insurer licensed or eligible surplus lines carrier • Certificate of insurance • Funds available whenever final post-closure occurs 	<p>264.145(e) 264.151(e)</p>		NOT IN APPLICATION
<p>1-7e Financial Test and Corporate Guarantee for Post-Closure</p> <p>To demonstrate that this test is met, an owner or operator must submit a letter signed by the company's chief financial officer that is worded as specified in 264.151(f) and meets the following criteria:</p>	<p>264.145(f) 264.151(f) 264.151(h)</p>	N/A	

(continued)

Subject requirement	40 CFR section Nos.	Location in application	Comments
<p>1-7e (continued)</p> <ul style="list-style-type: none"> • Tangible net worth \$10 million • Tangible net worth 6 x all closure and post-closure costs • U.S. assets at least 90 percent of total assets or at least six times all closure and postclosure costs • Bond rating requirements or alternative financial ratio tests • Application must include: <ul style="list-style-type: none"> - Copy of a report on the company's latest financial statements drafted by an independent certified public accountant (CPA) - Copy of a report from the owner's or operator's independent CPA to the owner or operator stating that he or she has examined the data in the letter from the chief financial officer and that it is consistent with the amounts in the independently-audited year-end financial statements for the latest fiscal year and that no matters came to attention to cause him to believe that the data should be adjusted <p>In lieu of the above items, the owner or operator may submit a corporate guarantee worded as required by 264.145(f). This guarantee provides that the guarantor, which must be the parent company of the owner or operator, will perform post-closure activities in accordance with the post-closure plan if the owner or operator fails to do so or will establish a post-closure trust fund for the owner or operator. A copy of these items should be submitted with the Part B for review by the permit writer.</p>	<p>264.145(f)(10)</p>	<p>N/A</p> <p>N/A</p>	
<p>1-7f Combinations</p> <p>1-7f(1) Use of Multiple Financial Mechanisms</p> <p>A copy of a combination of trust fund agreements, surety bond guaranteeing payment into a post-closure trust fund or letters of credit, insurance, and state assumption of responsibility, which provide financial assurance for the amount of post-closure. Combined financial assurance must be at least equal to the adjusted post-closure cost estimate. Financial assurance instruments must meet requirements</p>	<p>264.145(g)</p> <p>264.149</p>	<p>N/A</p>	

(continued)

Subject requirement	40 CFR section Nos.	Location in application	Comments
<p>1-7f(1) (continued)</p> <p>of 264.143(a),(b),(d), or (e) which include post-closure trust fund, surety bond guaranteeing payment into a post-closure trust fund, postclosure letter of credit, and post-closure insurance, respectively.</p>			
<p>1-7f(2) <u>Use of Financial Mechanism for Multiple Facilities</u></p> <p>A copy of a financial assurance mechanism for more than one facility showing for each facility, the EPA ID number, name, address, and amount of closure funds assured by the mechanism. Total funding must be no less than the sum required for each facility considered separately. Documents must be submitted to each Region where facilities are located. Financial test applies to the sum of closure and post-closure costs for all facilities.</p>	264.145(h)	N/A	
<p>1-8 <u>Liability Requirements</u></p> <p>Where applicable, a copy of the insurance policy or other documentation which comprise compliance with the requirements of 264.147. (Coverage is for all facilities owned and operated and applies until certification for closure and post-closure is completed. For facilities in Phase I authorized states, originally signed duplicates of executed instruments or certificates of insurance are not required until the time of permit issuance, except as required by state law.)</p>	270.14(b)(17) 264.147(a) 264.147(h)		NOT MET. MUST SHOW GOOD FAITH EFFORT AS PER EPA GUIDANCE.
<p>1-8a <u>Sudden Insurance</u></p> <p>Hazardous waste treatment, storage, or disposal facilities must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences.</p> <ul style="list-style-type: none"> • Amount of at least \$1 million per occurrence • An annual total of at least \$2 million, exclusive of legal costs 	264.147 (a through d) 264.151 (a, j) 264.147(a)		SAME AS 1-8.

(continued)

Subject requirement	40 CFR section Nos.	Location in application	Comments
<p>1-8a (continued)</p> <ul style="list-style-type: none"> • A signed duplicate original of the Hazardous Waste Facility Liability Endorsement worded as specified in 264.151(i), or • A Certificate of Liability Insurance worded as specified in 264.151(j) • Financial test <ul style="list-style-type: none"> - Letter from CFO - Auditor report - Auditor opinion - Other information requested by R.A. - Acceptable ratios 			
<p>1-8b <u>Nonsudden Insurance</u></p> <p>This applies to high risk storage facilities (designated by Regional Administrator), surface impoundments, land disposal and land treatment.</p> <ul style="list-style-type: none"> • At least \$3 million per occurrence • An annual total of at least \$6 million is required, exclusive of legal costs • Same endorsement or certification requirements as for sudden insurance coverage • Financial test <ul style="list-style-type: none"> - Letter from CFO (264.151(q)) - Auditor's report - Auditor's opinion - Other information requested by RA 	<p>264.147(b) and (d) 264.151(i) and (j) 264.147(f) 264.151(q)</p>		<p><i>SAME AS 1-8.</i></p>
<p>1-8c <u>Variance Procedures and RA Adjustments</u></p> <p>Evaluation of degree and duration of risk sufficient to allow RA to make a judgement on reduction of required liability. The financial responsibility levels specified above for liability insurance for sudden accidental occurrences may be adjusted downward if the owner or operator can prove to the Regional Administrator that these levels are not consistent with the degree and duration of risk at the owner's or operator's facility. Conversely, the Regional Administrator may adjust the levels of financial responsibility up</p>	<p>264.147(c) and (d)</p>		

(continued)

Subject requirement	40 CFR section Nos.	Location in application	Comments
<p>1-Bc (continued)</p> <p>or down, based on the Administrator's assessment of the degree and duration of risk associated with the facility.</p>			
<p>1-9 <u>State Financial Mechanism</u></p> <p>Where appropriate, proof of coverage by a State financial mechanism in compliance with 264.149 or 264.150.</p>	270.14(b)(18)	N/A	
<p>1-9a <u>Use of State-Required Mechanisms</u></p> <p>Where a state has hazardous waste regulations with equivalent or greater liability requirements for financial assurance for closure and post-closure care, evidence of establishment of the state-required financial mechanisms, including the facility EPA ID number, name, address, and amounts of coverage. If state-required mechanism does not satisfy amount of funds required, funds may be made available through increasing funds available through the state-required mechanisms or by using additional mechanisms specified in 264.143.</p>	264.149(a)	N/A	
<p>1-9b <u>State Assumption of Responsibility</u></p> <p>If a state assumes legal responsibility for compliance with closure, post-closure, or liability requirements or the state assures that state funds are available to cover those requirements, then facility is in compliance and must include a copy of a letter from the state describing the state assumption of responsibility and a letter from the owner or operator requesting that the state's assumption of responsibility be considered acceptable in meeting the financial coverage requirements, and including the facility EPA ID number, name, address, and amounts of liability coverage or funds for closure or post-closure care that are assured by the state.</p>	264.150	N/A	

(continued)

Subject requirement	40 CFR section Nos.	Location in application	Comments
<p>PART J - OTHER FEDERAL LAWS</p> <p>Demonstration of compliance if applicable with the requirements of applicable other federal laws such as the Wild and Scenic Rivers Act, National Historic Preservation Act of 1966, Endangered Species Act, Coastal Zone Management Act, Fish and Wildlife Coordination Act.</p>	<p>270.14(h)(20) 270.1</p>	<p>Ref. 3</p>	
<p>PART K - CERTIFICATION</p> <ul style="list-style-type: none"> • Certification of application by a principal executive of the company of at least the level of vice president. • Certification by a general partner or proprietor for a partnership or sole proprietorship, respectively. • Certification by a principal executive officer or ranking elected official for a municipality, state, federal, or other public agency. 	<p>270.11</p>		<p><i>Missing from Application.</i></p> <p><i>if applicable, missing</i></p> <p><i>N/A</i></p>

Subject requirement	40 CFR section Nos.	Location in application	Comments
<p>PART J - OTHER FEDERAL LAWS</p> <p>Demonstration of compliance if applicable with the requirements of applicable other federal laws such as the Wild and Scenic Rivers Act, National Historic Preservation Act of 1966, Endangered Species Act, Coastal Zone Management Act, Fish and Wildlife Coordination Act.</p>	<p>270.14(b)(20) 270.3</p>	<p>Ref. J N/A</p>	
<p>PART K - CERTIFICATION</p> <ul style="list-style-type: none"> • Certification of application by a principal executive of the company of at least the level of vice president. • Certification by a general partner or proprietor for a partnership or sole proprietorship, respectively. • Certification by a principal executive officer or ranking elected official for a municipality, state, federal, or other public agency. 	<p>270.11</p>		<p><i>NOT IN APPLICATION</i></p>

CEDAR CHEMICAL CORPORATION

24th Floor • 5100 Poplar Avenue • Memphis, TN 38137 • 901-685-5348

REPLY TO: P. O. BOX 3
VICKSBURG, MS 39180
(601) 636-1231

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
P 113 213 024

July, 1, 1988

Mr. Jack McCord
Environmental Engineer
Bureau of Pollution Control
2380 Highway 80 West
Jackson, Mississippi 39209

RECEIVED

JUL - 5 1988

Dept. of Natural Resources
Bureau of Pollution Control

Subject: Vicksburg Chemical
Hazardous Waste Drum Storage Area
Short Term Permit

Dear Mr. McCord:

As we discussed by telephone today, July 1, 1988, Vicksburg Chemical requests the issuance of a short term permit to allow treatment of containerized waste currently held in anticipation of off-site disposal.

The treatment is needed to effect safer handling of the material. The material to be treated consists of waste Dinoseb (P020) contaminated with sulfuric acid. When this particular material was drummed, there were no apparent liquids and no absorbent was added. Subsequently, the acid mentioned above has seeped out of the material and has corroded the containers. Four out of thirty-six drums have developed pin-hole seepage. Rather than re-containerizing the material as is, we wish to solidify it prior to drumming. The procedure we wish to use requires adding absorbent "outside" a container and therefore the request for short term permit.

The procedure to be used would be as follows:

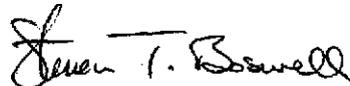
1. One drum at a time will be opened (seeping drums first), and the contents placed on a screen to drain as much free liquid as possible from the material. A small volume of water will be used to rinse off residual acid.
2. The liquid will be collected and placed in a lined, closed-head drum for off-site disposal.
3. The separated solids will be mixed with cement dust to neutralize and solidify these materials. Requisite safety equipment is present.

4. The solidified material will be re-containerized for off-site disposal.

To prevent a recurrence of this situation, removable, plastic, fiber reinforced drum liners have been purchased. All damaged or contaminated drums and equipment will be disposed off-site. We expect this procedure to require six weeks for completion.

If there are questions concerning this matter, please contact me.

Sincerely,



Steven T. Boswell
Director of Env. Affairs

STB: pc

DIVISION OF SOLID WASTE

REVIEWED BY ST

DATE 7-6-88

COMMENTS changed and

7-6-88 want extension

FILE COPY

June 20, 1988

Mr. Allen T. Malone
Apperson, Crump, Duzane, & Maxwell
Attorneys at Law
100 North Main Building
20th Floor
Memphis, Tennessee 38103

Dear Mr. Malone:

Re: Cedar Chemical Corporation
MSD990714081
Vicksburg, Mississippi

As you are probably aware, the Bureau of Pollution Control has received preliminary information regarding the proposed closure of the surface impoundment at Cedar Chemical Corporation. As discussed with the company we are withholding formal comments until such time as we receive a complete submittal. Upon receipt of the Closure Plan referenced in your letter of June 1, 1988, we intend to make a timely review with comments to the facility. We will also forward a copy of the Closure Plan to EPA Region IV for their review. However, based upon our discussions with Region IV we do not expect that EPA will provide formal comments to the Bureau on the Closure Plan.

Due to the Mississippi Commission on Natural Resources ruling on August 5, 1987, the Bureau will not bring the closure plan before the Permit Board for approval as a formal RCRA closure. However, the Bureau will provide comments on the closure plan's technical merits using RCRA requirements as guidance. Although the Bureau is not regulating Cedar Chemical's surface impoundment as a RCRA hazardous waste unit, we will continue to work with the facility to ensure that the impoundment is closed in an environmentally safe manner.

If you have any questions feel free to contact me at (601) 961-3171.

Sincerely,

Sam Mabry, Chief
Hazardous Waste Branch

SM\JBM:sae
cc: Fred Ahlers, Vicksburg Chemical
Jim Scarborough, U.S. EPA Region IV

CHARLES W. METCALF, 1840-1924
WILLIAM P. METCALF, 1872-1940
JOHN W. APPERSON, 1896-1985

CHARLES METCALF CRUMP
JERRE G. DUZANE
JOHN B. MAXWELL, JR.
ALLEN T. MALONE
PHILIP G. KAMINSKY
ROBERT L. DINKELSPIEL
MICHAEL E. HEWGLEY
JAMES F. RUSSELL
JOHN L. RYDER
COLBY S. MORGAN, JR.
TONI C. PARKER

SAMUEL RUBENSTEIN
JOHN HART TODD
OF COUNSEL

LAW OFFICES
APPERSON, CRUMP, DUZANE & MAXWELL

26TH FLOOR
100 NORTH MAIN BUILDING
MEMPHIS, TENNESSEE 38103
901/525-1711

EAST OFFICE

SUITE 100
KIRBY CENTRE
1755 KIRBY PARKWAY
MEMPHIS, TENNESSEE 38119
901/756-6300

October 31, 1986

RECEIVED

NOV - 3 1986

DEPT. OF NATURAL RESOURCE
BUREAU OF POLLUTION CONTROL

Mr. Sam Mabry
Director, Division of Solid
Hazardous Waste Management
Mississippi Department of
Natural Resources
P. O. Box 10385
Jackson, Mississippi 39209

Re: Cedar Chemical Corporation/Vicksburg Plant

Dear Mr. Mabry:

Thank you for furnishing me with a copy of your
October 22, 1986 letter to Fred Ahlers, Plant Manager of the
referenced Plant.

Responding to the expanded list of questions will take
considerable effort on the part of Company personnel. Management
has directed that top priority be given to this project, but I am
not optimistic that we can provide a full and complete response,
as well as the documentation requested, by November 6, 1986. I
am reasonably confident, however, that we can provide you with
this information at least one week prior to the Commission's next
meeting, which I understand is scheduled November 19, 1986.

If it would help, I can tell you at this point that
chlordane, methyl parathion and disulfoton were not produced at the
Vicksburg Plant since November, 1980 and therefore Questions num-
bered 8, 9 and 10 are not applicable. In addition, at least to
some extent, my letter to you of October 7, 1986 is responsive to
the final three questions.

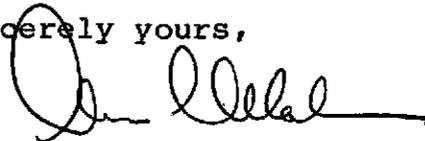
As you know, we were willing to attempt to work out a
mutually acceptable method of supplementing the Administrative
Record in order to accommodate EPA's apparent desire to broaden
the scope of the Commission's hearing last September. In light
of the broad scope of the sampling plan, which I understand was
carried out this week by the Department's contractor, and the
enlarged scope of the questions which you submitted to Mr.

Mr. Sam Mabry
October 31, 1986
Page Two

Ahlers, we do not believe that responses to the questions or results of the sampling should have any bearing on the issue that was put to the Commission in September. Accordingly, in order to avoid any misunderstanding, this will confirm that Cedar's willingness to cooperate with you in your investigative efforts should not be viewed as a consent to supplement the record in any respect. Nevertheless, we would hope that the responses to the questionnaire as well as analytical results of the latest round of sampling will make your Department as well as EPA Region IV more comfortable with the Company's continued maintenance of the surface impoundment in accordance with existing uses.

Please contact me promptly upon your receipt of the analytical results of the recent sampling efforts.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Allen T. Malone", with a long horizontal flourish extending to the right.

Allen T. Malone

ATM:jw

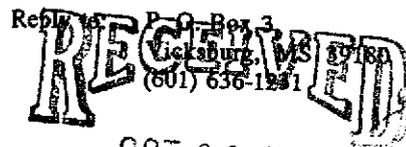
cc: Col. Charles L. Blalock

CEDAR CHEMICAL CORPORATION

24th Floor • 5100 Poplar Avenue • Memphis, TN 38137 • 901-767-6851

October 24, 1986

Mr. Jack McCord
Mississippi Department of Natural Resources
Bureau of Pollution Control
Industrial Wastewater Control Section
2380 Highway 80 West
Jackson, MS 39204



OCT 29 1986

DEPT. OF NATURAL RESOURCES
BUREAU OF POLLUTION CONTROL

Re: Biological Treatment of Dinoseb Wastewater

Dear Mr. McCord:

Vicksburg Chemical has tested and is considering installation of a biological treatment system for wastewater from the Dinoseb process. The basic treatment process, as currently envisioned, is shown in Figure 1.

Unneutralized Dinoseb washwater ($\text{pH} < 1$) and any other Dinoseb contaminated water will be stored in a tank for equalization prior to treatment. The wastewater will then be fed continuously through carbon adsorbers to remove Dinoseb, neutralized with caustic, and water added to control dissolved solids prior to an advanced fixed-film aerated biological treatment system. Using the fixed-film system reduces tremendously the amount of biological solids formed, but some solids are expected and a clarifier or other solids separation device is anticipated. All of the system will be above ground. The liquid effluent will be discharged under our NPDES Permit. Mr. Mahaffy has been contacted concerning permitting needs and the impact of this proposal on our NPDES Permit.

What are the Solid Waste (RCRA or other) permitting requirements for this system? In what parts of design/construction/startup does your department participate? Both the storage tank and DNBP removal systems operate at very low pH. What specific construction requirements and permits will apply to these areas? The stabilized biological solids produced should be acceptable to the municipal landfill. Are there any requirements in this area?

I appreciate your consideration of this matter and look forward to discussing this project further. If you have any questions, please feel free to give me a call.

Sincerely,



John G. Hill
Environmental Engineer

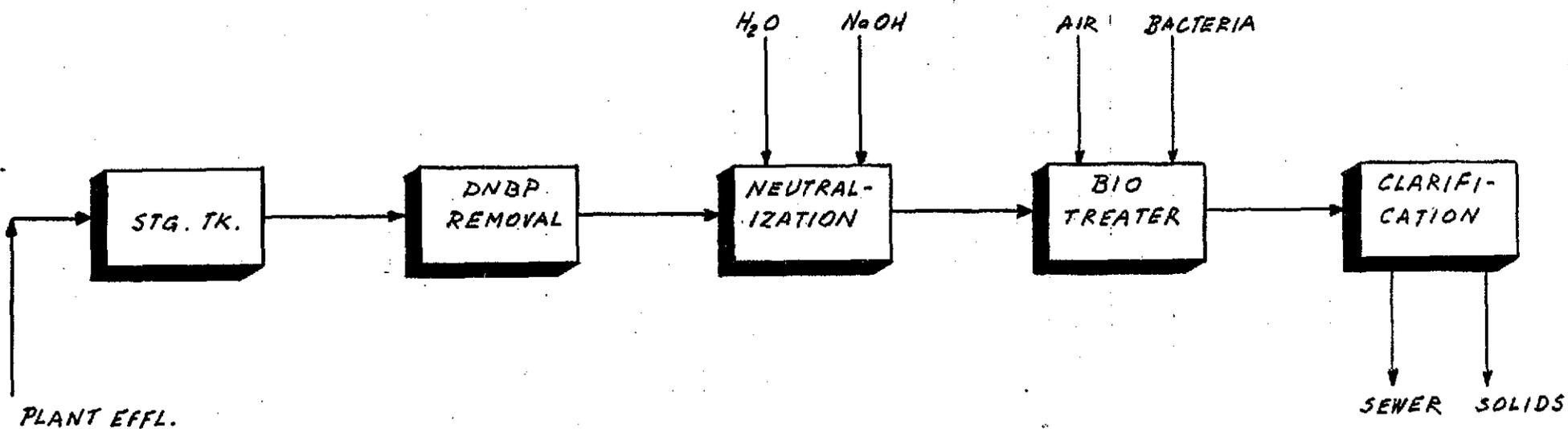
JGH/lđ
Enc.

cc - F. Ahlers

BLOCK DIAGRAM

4-25-86
S.T.L.

THE DEVELOPED BIOTREATING SYSTEM OF VICKSBURG CHEMICAL CO.'S
DINITROBUTYL PHENOL PLANT EFFLUENT.



LAW OFFICES
APPERSON, CRUMP, DUZANE & MAXWELL

26TH FLOOR

100 NORTH MAIN BUILDING
MEMPHIS, TENNESSEE 38103

901/525-1711

EAST OFFICE

SUITE 100
KIRBY CENTRE
1755 KIRBY PARKWAY
MEMPHIS, TENNESSEE 38119
901/756-6300

CHARLES W. METCALF, 1840-1924
WILLIAM P. METCALF, 1872-1940
JOHN W. APPERSON, 1895-1985

CHARLES METCALF CRUMP
JERRE G. DUZANE
JOHN B. MAXWELL, JR.
ALLEN T. MALONE
PHILIP G. KAMINSKY
ROBERT L. DINKELSPIEL
MICHAEL E. HEWGLEY
JAMES F. RUSSELL
JOHN L. RYDER
COLBY S. MORGAN, JR.
TONI C. PARKER

SAMUEL RUBENSTEIN
JOHN HART TODD
OF COUNSEL

October 20, 1986

Colonel Charles L. Blalock
Executive Director
Mississippi Department of Natural Resources
P. O. Box 20305
Jackson, Mississippi 39209

Re: Mississippi Commission on Natural Resources
Order No. 1046-86

Dear Colonel Blalock:

This letter is submitted on behalf of Cedar Chemical Corporation, Respondent in the referenced Order, in support of its motion to dismiss the complaint referred to in the Order, which was heard at the last Commission Meeting on September 16, 1986. I would be obliged if you would enclose copies of this letter to be delivered to the Commission members and make available the documents enclosed herewith, namely:

Item 1. Post-Hearing Memorandum on behalf of Cedar Chemical Corporation;

Item 2. Copy of my letter dated October 7, 1986 to Sam Mambry, Director of Division of Solid Hazardous Waste Management, Mississippi Department of Natural Resources.

Item 3. Copy of the test results referred to in the third page of my letter to Mr. Mambry, relative to concentrations of toxaphene in the sediment of the surface impoundment, which was the subject of the hearing last month.

Item 4. Additional results of toxaphene analysis, by weight, of the 18 retained pond sediment samples gathered by the respondent in September, 1986 (which were heretofore submitted for analysis of dinoseb, by weight, the results of which were presented at the hearing last month).

Colonel Charles L. Blalock
October 20, 1986
Page Two

As the Commission will recall, it was stipulated by the Department at our hearing last month that the sole basis for regulation of the subject surface impoundment under RCRA related to dinoseb manufacturing operations at Cedar's Vicksburg Facility, including trace levels of dinoseb contamination in soils and sediments at the Plant. Our preparation for the hearing, as well as our preparation of the enclosed Post-Hearing Brief (Item 1) were based on that position.

We have now been advised that the Department does not contest our client's position with respect to dinoseb, but we further understand that the Environmental Protection Agency has urged the Department to expand the scope of the hearing to determine if RCRA Regulation of the surface impoundment can be justified by the presence of some other contaminant or some other previous manufacturing activity at the Plant - specifically, activities related to toxaphene manufacture which ceased in March, 1982. My letter to Mr. Mambry of October 7, 1986, addressed these new issues (See Items 2 and 3 enclosed). Immediately thereafter Cedar commissioned analysis of additional samples (See Item 4), which indicated no toxaphene contamination at the limit of detection reported by the laboratory of .1 parts per million.

It was hoped, that the procedure suggested in my letter to Mr. Mambry, together with the subsequent test results (Item 4), which were delivered to him would afford a basis for concluding these matters by agreement prior to the next Commission meeting. It now appears, however, that the scope of the inquiry is broadening to include matters that we do not view to be relevant to the issue which was put before the Commission last month - namely, whether the surface impoundment should be subjected to regulation (and immediate closure) under RCRA Regulations.

We have attempted to cooperate with the Department in supplying information it has requested, and Cedar will continue to do so in the future. Nevertheless, we submit that Cedar is entitled to a decision on its motion based on the testimony and evidence presented at the hearing on September 16, 1986. We therefore respectfully request that the Commission act on Cedar's Motion to Dismiss, and find, as we believe it must, that the sub-

APPERSON, CRUMP, DUZANE & MAXWELL

Colonel Charles L. Blalock
October 20, 1986
Page Three

ject surface impoundment is not subject to RCRA Regulation for the reasons outlined in the Post-Hearing Memorandum enclosed herewith.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Allen T. Malone", with a long horizontal line extending to the right.

Allen T. Malone

ATM:jw

Enclosures

cc: Mr. William L. Smith
Mr. George Williamson
Mr. Charles H. Chisohm

BEFORE THE MISSISSIPPI COMMISSION ON NATURAL RESOURCES
BUREAU OF POLLUTION CONTROL

IN THE MATTER OF:

MISSISSIPPI COMMISSION
ON NATURAL RESOURCES,

vs.

ORDER NO. 1046-86

CEDAR CHEMICAL CORPORATION
(Successor to Vertac Chemical
Corporation)

POST-HEARING MEMORANDUM

This Memorandum is submitted on behalf of Cedar Chemical Corporation ("Cedar") at the Commission's request following a hearing held before the Commission on September 16, 1986 to consider Cedar's Motion to Dismiss referred to in Paragraph 7 of the Commission's Order No. 1046-86 entered August 26, 1986.

ISSUES: The ultimate issue raised in Cedar's Motion is whether the surface impoundment located at Cedar's "South Plant" in Vicksburg, Mississippi (the "Pond") is a facility used for the treatment, storage or disposal of "hazardous waste," as defined by the Mississippi Hazardous Waste Management Regulations ("RCRA Regulations"), and therefore a "regulated unit" subject to those RCRA Regulations affecting such facilities.

The Mississippi Department of Natural Resources ("MDNR") contends that the Pond is properly designated a RCRA Facility by virtue of the so-called "mixture rule" at MHWMR 261.3(a)(2)(iv).

Cedar contends that the so-called "de minimis exception" to the mixture rule, codified at MHWMR 261.3(a)(2)(iv)(D), is applicable to the Pond, therefore taking the Pond out of what would otherwise be classified as a RCRA Facility, and permitting the Company to avoid what otherwise would be a mandatory closure of the Pond under RCRA.

The MDNR also suggested at the hearing that leaks of dinitrobutylphenol (dinoseb or DNBP) waste stored at the South Plant were not properly within the designation of manufacturing operations and could have entered the Pond, thereby making the Pond ineligible for the de minimis exception to the mixture rule.

Cedar contends that the only losses of dinoseb at the South Plant which could conceivably have been discharged to the Pond (either in the form of rainwater runoff or through the Plant's sewer system) have been losses which are squarely within the "de minimus exception" covered by MHWMR 261.3(a)(2)(iv)(D).

According to testimony of Gary N. Dietrich, who formerly served as Director of the Office of Solid Waste of the Environmental Protection Agency and who supervised the drafting of the RCRA "de minimus exception," a determination of whether the Pond is exempt from RCRA regulation under the de minimus exception requires the following findings:

a. That liquid from the Pond is discharged pursuant to a Section 402 Clean Water Act Permit;

b. That the only hazardous waste going into the Pond is a chemical product listed in Section 261.33 (in this case, dinoseb);

c. That the dinoseb entering the Pond was produced in the course of manufacturing operations at the facility.

d. That the dinoseb entering the Pond derives only from losses of this product in the course of manufacturing operations at the facility;

e. That dinoseb losses at the facility are "de minimus" as that term is used in the applicable regulation; and

f. That no dinoseb entering the Pond derived from deliberate discarding or major leaks or spills of hazardous waste, including dinoseb. (See Cedar Exhibit 1)

Based on testimony of Mr. Dietrich, which was not contested by the MDNR, the above findings of fact would lead to a legal conclusion that the de minimus exception under RCRA is applicable, thereby exempting the Pond from RCRA Regulations affecting s hazardous waste facilities.

PROPOSED FINDINGS OF FACT

1. Is the liquid from the Pond discharged pursuant to a Section 402 Clean Water Act Permit?

Based on evidence presented at the hearing, which was undisputed by the MDNR, Cedar and its predecessors have operated the Pond as a point source for discharges pursuant to a Section 402 Clean Water Act Permit since prior to the effective date of RCRA.

2. Is the only hazardous waste entering the Pond a chemical product listed under MHWMR 261.33, and is this product in fact dinoseb?

Based on evidence presented at the hearing, which was undisputed by the MDNR, the commercial product, dinoseb, when discarded, is a hazardous waste listed under MHWMR 261.33, and is the only such hazardous waste shown to enter the Pond.

3. Is the dinoseb entering the Pond produced in the course of manufacturing operations at Cedar's facility?

It is undisputed that Cedar and its predecessors have been engaged in the manufacture of dinoseb at the South Plant at Cedar's Vicksburg facility since 1973, and the only dinoseb that could have conceivably entered the Pond since 1973 was dinoseb manufactured at the facility.

4. Does dinoseb which enters the Pond derive only from losses of dinoseb from manufacturing operations at the facility?

The MDNR suggested several possibilities that, in its view, could remove the Pond from the de minimis exception, each on the theory that some quantities of dinoseb introduced into the Pond may not have derived from "manufacturing operations" at the

South Plant. First, counsel for the MDNR implied that because dinoseb process wastewater once entered the Pond, MDNR may take the position that the Pond cannot be exempted from RCRA regulation under the de minimis exception. Second, the MDNR theorized that the contents of some drums stored in the returned product and hazardous waste storage areas may have contained spent carbon which could have leaked from the drums and found its way into the Pond. Finally, it was argued that carbon particles with dinoseb attached might constitute hazardous waste which could serve to take the Pond out of the exception when the particles are back-washed into the Pond in the carbon filter cleaning process. The regulations and evidence developed at the hearing do not support the MDNR's theories.

Mr. Estes of MDNR agreed with Mr. Dietrich that dinoseb process wastewater is not a listed hazardous waste. Therefore, the fact that some of the wastewater may have entered the Pond in the past is irrelevant to the issue presently before the Commission.

Likewise, the evidence at the hearing failed to demonstrate that the contents of the subject drums was hazardous waste. Moreover, even if the drums had contained spent carbon which had absorbed dinoseb, as MDNR surmised, Mr. Dietrich testified that such is not a listed hazardous waste. Further, there was no evidence whatsoever that any of the contents of the drums was ever introduced into the Pond. Indeed, Mr. Keen

testified that water run-off from the areas where the drums may have been stored cannot find its way into the Pond because sewer pipes in the returned product and hazardous waste storage areas are segregated from the main sewer system which empties into the Pond.

Similarly, Mr. Dietrich testified that discharge of backwash from filter-cleaning operations merely constitutes a recycling of wastes removed from the Pond in the first place, and that such backwash does not constitute hazardous waste under RCRA. It is also submitted that such discharges are consistent with the "normal materials handling operations" described in the de minimis exception (e.g., "discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers . . .") and thus by definition fall within the term "manufacturing operations."

In summary, apart from the debatable question whether the waste handling procedures described above are part of the Plant's "manufacturing operations," the record does not reflect that any "hazardous waste" could have been lost in the course of such procedures and entered the Pond.

5. Are prior and current losses of dinoseb from manufacturing operations de minimis?

The undisputed evidence adduced at the hearing clearly demonstrates that the dinoseb which has entered the Pond derived

only from de minimis losses of the product in the manufacturing operations at the facility.

MHWMR 261.3(a)(2)(iv)(D) provides examples of types of losses from manufacturing operations which are considered de minimis. They include:

those from normal material handling operations (e.g. spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing;

Mr. Keen, who has worked in various supervisory capacities at the facility since 1972 and has been Product Manager since 1982, testified concerning the losses which occur in the dinoseb manufacturing operations at the facility. The types of losses described by Mr. Keen are in most cases identical to the ones given as examples in the regulation and the others are closely analagous. Mr. Dietrich testified that, in his opinion, the types of losses which occur at the facility are exactly the type he and the EPA had in mind when the de minimis exception was promulgated in 1981.

Mr. Dietrich sponsored exhibits (Cedar Exhibit Nos. 5 and 6) and testimony which reflect his calculations of the

average daily losses of dinoseb from manufacturing operations at Cedar's South Plant. On Exhibit 6 he showed that dinoseb losses would go to three places: (1) Onto the surface of soils of the South Plant where it would accumulate over time; (2) to the Pond, as dissolved or suspended material in the drain and rainwater run-off from the South Plant and from the Pond to the carbon filter system where it would be removed prior to discharge of Pond water to the Mississippi River, and (3) to the Pond as settleable material in rainwater run-off from the South Plant, where it would be accumulated in the sediments of the Pond.

By extrapolating from the analyses of soil, water and sediment samples taken from these three areas to determine probable daily losses of dinoseb from manufacturing operations, and comparing those results to average daily production of dinoseb during the thirteen years of operation of the Plant, Mr. Dietrich concluded that, in his considered opinion, such losses, which he calculated to be far less than one-tenth of one percent, are clearly de minimis as contemplated by him and the EPA when the de minimis exception was promulgated.

The MDNR neither challenged Mr. Dietrich's calculations of daily losses of dinoseb, nor offered any of its own. Its evidence consisted solely of concentration readings from samples it took from two Pond water samples, two Pond sediment samples, one surface soil sample, and three sump water samples. These readings were consistent with the samples analyzed by the Company, according to Mr. Dietrich's testimony.

Finally, Mr. Keen testified that losses of dinoseb going into the Pond after November, 1985 will be even less than in the past. In November, 1985, Cedar completed modifications to its sewer system to prevent losses of dinoseb from manufacturing operations from flowing to the Pond. Losses are now vacuumed into tank trucks and are either recycled or disposed of off-site.

6. Does any dinoseb which is entering the Pond derive from deliberate discarding or major leaks or spills of this product?

The undisputed evidence is that dinoseb entering the Pond does not and never has derived from deliberate discarding or from any major leaks or spills.

Mr. Keen and Mr. Ahlers both testified that Cedar and its predecessors have never discarded any of the commercial products manufactured at the facility into the Pond. Additionally, neither was aware of any major leaks or spills of dinoseb, much less any which have gotten into the Pond. Indeed, Mr. Keen reviewed the supervisors' logs, hazardous waste inspection reports, and the excessive spill or emissions reports in which the occurrence of major leaks and spills would be recorded and found no notations of any having occurred since the effective date of RCRA, November 19, 1980.

7. Are there any other factors which would support a conclusion that the Pond should be regulated as a hazardous waste management facility under RCRA?

There is no evidence before the Commission that the Pond poses a substantial threat to human health or the environment. Mr. Dietrich testified exactly to the contrary. Moreover, as Mr. Dietrich, Mr. Ahlers and Mr. Keen all pointed out, the Pond serves a useful environmental purpose as a "safety net" in the event of a catastrophic event at the facility. The Industrial Waste Section of the Bureau of Pollution Control is also on record as late as post-August, 1983 as advocating that the Pond be left open to collect the large amount of rainwater run-off from the plant, and to serve as a spill containment area in the event of an unexpected catastrophic upset at the South Plant (see Cedar Exhibit No. ____).

If it were determined that the Pond is properly designated a hazardous waste management facility under RCRA, RCRA Regulations (and the recent Commission Order) would require that the Pond be closed. According to testimony of Mr. Keen and Mr. Ahlers, in order to close the Pond, Cedar would have to construct alternate facilities to receive the large volume of rainwater run-off from the facility, as well as the periodic discharge of non-hazardous waste from its North Plant, which the Pond currently receives. Depending on the time schedule involved and other factors, such construction could result in a temporary or even permanent plant closing with resulting reduction in work force. At

a minimum, the Pond closing and construction of alternate facilities could involve costs of up to \$6,000,000.

Mr. Estes of the MDNR expressed his opinion that the Pond is of "regulatory concern" due to DNBP in the sediment. Cedar would show that, in the event it is determined that the de minimis exception applies, the Pond will still be subject to regulation under the imminent hazardous provisions of §7008(h) of RCRA, not to mention other environmental statutes such as CERCLA. In addition, discharge from the Pond will continue to be regulated under §402 of the Clean Waste Act. Thus, Mr. Estes' regulatory concern clearly can be met without imposing RCRA Regulations mandating elimination of the Pond.

CONCLUSION

In light of the findings of fact which are inescapable from the evidence presented at the hearing, it must be concluded as a matter of law that the Pond is not subject to RCRA Regulations which regulate facilities used for treatment, storage or disposal of hazardous waste. Accordingly, Cedar submits that its Motion to Dismiss the Complaint referred to in the subject Order must be granted.

Dated: October 20th, 1986.

Respectfully submitted,

CEDAR CHEMICAL CORPORATION
(Successor to Vertac Chemical
Corporation)

By: William L. Smith
William L. Smith
R. David Kaufman

BRUNINI, GRANTHAM, GROWER & HEWES
1400 Trustmark Building
Post Office Drawer 119
Jackson, Mississippi 39205
Telephone: (601) 948-3101

Allen T. Malone by WL5
Allen T. Malone

APPERSON, CRUMP, DUZANE & MAXWELL
26th Floor, 100 North Main Building
Memphis, Tennessee 38103
Telephone: (901) 525-1711
ATTORNEYS FOR CEDAR CHEMICAL
CORPORATION

July 31, 1986

CERTIFIED MAIL NO. P 283 765 886

FILE COPY

Mr. Fred Ahlers
Plant Manager
Vicksburg Chemical Corporation
P. O. Box 3
Vicksburg, Mississippi 39180

Dear Mr. Ahlers:

Re: Part B Application Denial and
Closure Plan Comments
MSD990714081

This is to notify you that the Mississippi Natural Resources Permit Board's decision to deny issuance of a hazardous waste storage permit to Vicksburg Chemical is final as of this date. Therefore, Vicksburg Chemical has 15 days from the receipt of this letter to either submit an interim status closure/post closure plan in accordance with the Mississippi Hazardous Waste Management Regulations Part 265 or to notify the Bureau, in writing, that you wish the closure and post closure plans submitted with your Part B application to be considered as your interim status closure plan.

We have completed our review of your Part B closure and post closure plans and our comments are attached. Should you choose to use these plans as stated above, they must be modified to address the attached comments and resubmitted to our office by September 1, 1986. The soil should be covered with a buffer layer that provides good drainage with a gravel lined free base for additional layers. If you have any questions or comments, please contact Mr. Jack McFord, of my staff, at 961-5171.

Very truly yours,

Provision for establishing and maintaining permanent cover should be reflected in the plan and post-closure plan.

Charles H. Chisolm
Bureau Director

CHC:JBM:cm

Attachment

cc: Mr. John G. Hill, Vicksburg Chemical Corporation
Mr. Jim Scarbrough, EPA

VICKSBURG CHEMICAL CORPORATION -
CLOSURE/POST-CLOSURE PLAN REVIEW
JULY, 1986
ITEMS NEEDED ATTENTION

1. The stabilized sediment and sludge must pass a paint filter test.
2. The rinsate from decontamination of equipment associated with the operation of the impoundment should be handled in the same manner as the rinsate from decontamination of equipment used during closure.
3. How will the rinsate be collected and transported to the wastewater treatment system?
4. Vertac must describe the USCS classification of the clay to be used in the cap. Additional specifications such as water content and organic content must also be submitted.
5. Will the clay liner be constructed in lifts, and if so what will be the uncompacted thickness of each lift.
6. What methods will be used to compact the clay cap, and to what density will the clay be compacted.
7. The installation of the drain pipes to prevent ponding on top of the landfill must be included as part of the closure plan.
8. Calculations should be provided to show that the drain pipes are capable of removing the precipitation from a 10 year, 1 hour storm event.
9. Vertac must perform a water balance on the cover system to determine percolation rates through the cap.
10. The solidified sludge and soil should be covered with a buffer layer that provides good drainage and a smooth clod free base for additional layers. Since Vertac proposes to close the impoundment below the level of the dikes, the drainage layer should include drainage pipes to release any water percolation through the cap.
11. Provisions must be made for establishing and maintaining permanently surveyed benchmarks. These costs should be reflected in the facility's closure and post-closure plan.
12. Certification of closure must be by both an independent registered Professional Engineer, and the owner/operator.
13. The post-closure plan must include provisions for maintaining the permanent surveyed benchmarks.
14. Any changes in the closure or post-closure plans must be reflected in the cost estimates.
15. The specifications of the top soil should include the USCS classification.
16. The closure plan should specify how the topsoil will be prepared prior to planting.

17. The topsoil should be placed on the cap relatively dry to prevent compaction.

18. Vicksburg Chemical must specify what methods of quality assurance and quality control will be implemented during construction to ensure the closure plan is followed and materials meet specifications.

JM:cm

LPA ID MS09907140

FACILITY NAME Jordan Chemical

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PROCESS CODE	AMOUNT	UNIT (CHECK ONE)	
501 CONTAINERS		<input type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
502 STORAGE TANKS	1630000	<input checked="" type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
701 TREATMENT TANKS		<input type="checkbox"/> GPD	<input type="checkbox"/> LPD
704 OTHER TREATMENT	1200000	<input checked="" type="checkbox"/> GPD	<input type="checkbox"/> LPD
703 INCINERATOR		<input type="checkbox"/> TONS/hr	<input type="checkbox"/> M TONS/hr
		<input type="checkbox"/> GAL/hr	<input type="checkbox"/> BTU/hr
803 WASTE PILES		<input type="checkbox"/> Cu Yards	<input type="checkbox"/> Cu Meters
804 STORAGE SURFACE IMPOUNDMENTS	3000000	<input checked="" type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
702 TREATMENT SURFACE IMPOUNDMENTS		<input type="checkbox"/> GPD	<input type="checkbox"/> LPD
803 DISPOSAL SURFACE IMPOUNDMENTS		<input type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
879 INJECTION WELLS		<input type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
880 LANDFILLS		<input type="checkbox"/> ACRES-feet	<input type="checkbox"/> HECTARE-feet
881 LAND APPLICATION		<input type="checkbox"/> ACRES	<input type="checkbox"/> HECTARES

- 1. PWC 3 CALL-IN
- 2. PWC 3 RECEIVED
- 4. NED SDVT
1st notice of deficiency
2nd notice of deficiency
notice of violation
- 6. APPLICATION COMPLETE
- 13. PUBLIC NOTICE
 draft permit. HMA not applicable
 state permit. HMA portion not included
 joint permit, with compliance schedule
 joint permit, schedule not required
 withdrawn, interim status terminated
- 16. PERMIT DETERMINATION
 issued. HMA not applicable
 issued. HMA portion not included
 issued. With HMA compliance schedule
 issued. Schedule not required
 denied
 withdrawn, interim status terminated.
- 17. PERMIT EFFECTIVE
- 18. PERMIT EXPIRES
- 22. PERMIT TERMINATED
- 20. PERMIT MODIFIED
 groundwater monitoring
 corrective action
 both GWM and CA
 other
- 33. REQUESTED WITHDRAWAL
 90 day storage
 small quantity generator
 no HMA waste handled now
 protective filler
 closing
- 32. DETERMINATION ON REQUEST
 approved. Closure plan approved.
 approved. No closure required.
 denied

- 37. DOUBLE LINER WAIVER REQUESTED
- 38. DETERMINATION ON WAIVER
 approved
 disapproved
- 39. FACILITY NOT SCREEN
 environmentally significant
 not significant
- 40. FACILITY NOT PLAN APPROVED
- 43. EXPOSURE INFORMATION RECEIVED
- 45. REFERRED FOR HEALTH ASSESSMENT
- 47. SOILS DETERMINATION
 yes. SOIs present
 no. SOIs not present
- 54. FHELM ASSESSMENT COMPLETE
 remedial inv. necessary
 remedial inv. not required
- 57. REMEDIAL INV. PLAN APPROVED
 as part of permit
 in compliance order
- 58. REMEDIAL INV. COMPLETE
 corrective measures necessary
 corrective measures not required
- 59. CORA. MEASURES PLAN APPROVED
- 62. DETERMINATION OF COMPLIANCE WITH 265.91 and/or 270.14(c)
- 63. MONITORING PROGRAM DEVELOPED
 detection monitoring/permit
 detection monitoring/order
 compliance monitoring/permit
 compliance monitoring/order
 corrective action/permit
 corrective action/order
- ***REQUIRED FROM EPA PERMIT HOLDERS***
- 3. INITIAL REVIEW COMPLETED
- 5. ADDITIONAL INFO RECEIVED
- 80. NED TO SDGT
- 81. SITE VISIT

EPA ID

MSD990714081

For State Use Only

FACILITY NAME

Vertac Chemical

CALCULATED
SOLID
WASTE
BY
MATERIAL
TYPE
CODE

PROCESS CODE	AMOUNT	UNIT (CHECK ONE)	
801 CONTAINERS		<input type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
802 STORAGE TANKS	1630000	<input checked="" type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
701 TREATMENT TANKS		<input type="checkbox"/> GPD	<input type="checkbox"/> LPD
704 OTHER TREATMENT	1200000	<input checked="" type="checkbox"/> GPD	<input type="checkbox"/> LPD
703 INCINERATOR		<input type="checkbox"/> TONS/hr <input type="checkbox"/> GAL/hr	<input type="checkbox"/> M TONS/hr <input type="checkbox"/> BTU/hr
803 WASTE PILES		<input type="checkbox"/> Cu Yards	<input type="checkbox"/> Cu Meters
804 STORAGE SURFACE IMPOUNDMENTS	3000000	<input checked="" type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
702 TREATMENT SURFACE IMPOUNDMENTS		<input type="checkbox"/> GPD	<input type="checkbox"/> LPD
803 DISPOSAL SURFACE IMPOUNDMENTS		<input type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
D79 INJECTION WELLS		<input type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
D80 LANDFILLS		<input type="checkbox"/> ACRE-feet	<input type="checkbox"/> HECTARE-feet
D81 LAND APPLICATION		<input type="checkbox"/> ACRES	<input type="checkbox"/> HECTARES

UNITS ATTEMPTING CLOSURE

02 CLOSURE PLAN REQUESTED	<input type="checkbox"/>	Comments: _____
03 CLOSURE PLAN SUBMITTED	<input type="checkbox"/>	Comments: (partial closure?) _____
04 RED OF CLOSURE	<input type="checkbox"/>	Comments: _____
09 CLOSURE PLAN REINSTATED	<input type="checkbox"/>	Comments: _____
05 CLOSURE PLAN DETERMINED ADEQUATE	<input type="checkbox"/>	Comments: _____
06 PUBLIC NOTICE OF CLOSURE PLAN	<input type="checkbox"/>	Comments: _____
07 PUBLIC HEARING HELD	<input type="checkbox"/>	Comments: _____
10 FINAL CLOSURE PLAN APPROVED	<input type="checkbox"/>	Comments: (adjustments?) _____
11 CLOSURE PROCESS BEGAN	<input type="checkbox"/>	Comments: _____
12 CLOSURE CERTIFICATION RECEIVED	<input type="checkbox"/>	Comments: _____
13 CLOSURE PERIOD COMPLETED	<input type="checkbox"/>	Comments: _____
14 FACILITY RELEASED FROM CLOSURE	<input type="checkbox"/>	Comments: (post closure required?) _____
15 DATE INSPECTED TO CONFIRM CLOSURE	<input type="checkbox"/>	Comments: _____

ONSET CLOSURE DATE. POST CLOSURE REQUIRED.

02 C/FC PLAN REQUESTED	8/5/11/14
03 C/FC PLAN SUBMITTED	<input type="checkbox"/>
04 RED SENT	<input type="checkbox"/>
09 C/FC PLAN REINSTATED	<input type="checkbox"/>
05 C/FC PLAN DETERMINED ADEQUATE	<input type="checkbox"/>
06 PUBLIC NOTICE OF C/FC PLAN	<input type="checkbox"/>
07 PUBLIC HEARING HELD	<input type="checkbox"/>
10 C/FC PLAN APPROVED	<input type="checkbox"/>
11 CLOSURE PROCESS BEGAN	<input type="checkbox"/>
14 CLOSURE CERTIFICATION RECEIVED	<input type="checkbox"/>
19 DATE INSPECTED TO CONFIRM CLOSURE	<input type="checkbox"/>
17 RELEASED FROM CLOSURE REQUIREMENTS	<input type="checkbox"/>
13 FC PROCESS BEGAN	<input type="checkbox"/>

* not requested to be reported for storage or incineration facilities.

M. Miss. Dept. of Natural Resources, P. O. Box 10385, Jackson, MS. 39205

To Vicksburg Evening Post, Dr.
Vicksburg Sunday Post

MEMBER
AUDIT BUREAU OF CIRCULATIONS

SOUTHERN PRINTING CO., INC.

MEMBER
THE ASSOCIATED PRESS

6/9	86	Legal Notice - Notice to Proposal to Deny a	13	86		
		Permit for Vertac Chemical & 1 Proof	1	00		
			14	86		

STATE OF MISSISSIPPI,
Warren County

Personally appeared before me, the undersigned Notary Public for Warren County, State of Mississippi, Louis P. Cashman III, one of the publishers of the VICKSBURG EVENING POST, a newspaper published in Vicksburg, in the aforesaid County and State, who made oath that the notice of Public notice-Proposal to deny a permit application submitted by Vertac Chemical Corp, Vicksburg, Ms. a true copy of which is hereto attached, was published in said newspaper on the following dates:

- Monday, the 9th day of June, 19 86
- _____, the _____ day of _____, 19 _____
- _____, the _____ day of _____, 19 _____
- _____, the _____ day of _____, 19 _____
- _____, the _____ day of _____, 19 _____
- _____, the _____ day of _____, 19 _____
- _____, the _____ day of _____, 19 _____

Louis P. Cashman III

Sworn to and subscribed before me, the undersigned Notary Public, this 29th day of September, 19 86.

Joseph Knapp
Notary Public.
MY COMMISSION EXPIRES IN March 21, 1990

PERMIT BOARD
Public Notice
Proposal to Deny
a Permit Application
Submitted by
Vertac Chemical
Corporation
ID #MSD990714081
Vicksburg, Mississippi
UNDER RESOURCE CON-
SERVATION AND RECOVERY
ACT AND THE SOLID WASTE
DISPOSAL LAW
Under the authority set forth
above, and the rules promulgated
thereunder, the Mississippi Per-
mit Board proposes to deny Issu-
ance of a permit to Vertac
Chemical Corporation
(MSD990714081). This notice an-
nounces the availability of the
Fact Sheet, required by Mis-
sissippi Hazardous Waste Rule
124.8, which sets forth the basis for
the proposed decision. The Board
will accept comments on its pro-
posed action until July 21, 1986.
The Board will hold a public
hearing if a request is received
which indicates opposition to this
proposal and explicitly sets forth
the issues to be raised at the hear-
ing. Alternatively, the Board may
on its own initiative hold a hearing
if significant interest is shown
during the comment period. In
any case, if the Board chooses to
hold a hearing, another notice will
be issued which will delineate the
date, time, and place for the
hearing.
All comments presented during
the comment period will be con-
sidered in the formulation of a
final decision. For additional in-
formation, Jack McMillen of the
Division of Solid and Hazardous
Waste should be contacted at 961-
5171.
Please bring the foregoing to the
attention of persons whom you
know will be interested.
June 9-11

June 4, 1986

FILE COPY

The Clarion-Ledger
Jackson Daily News
Legal Notices
P. O. Box 40
Jackson, Mississippi 39205

Gentlemen:

Enclosed herewith is a legal notice to be published in your newspaper on June 9, 1986.

Please furnish this office with statement and proof of publication in duplicate.

Very truly yours,

Jack B. McCord
Hazardous Waste Section

JBMc:cl
Enclosure
cc: Ms. Terry Bailey

FILE COPY

June 4, 1986

Vicksburg Evening Post
Legal Notices
P. O. Box 76
Vicksburg, Mississippi 39180

Gentlemen:

Enclosed herewith is a legal notice to be published in your newspaper on June 9, 1986.

Please furnish this office with statement and proof of publication in duplicate.

Very truly yours,

Jack B. McCord
Hazardous Waste Section

JBMc:cl
Enclosure
cc: Ms. Terry Bailey

PERMIT BOARD
Public Notice
Proposal to Denay a Permit Application
Submitted by
Vertac Chemical Corporation
ID #MSD990714081
Vicksburg, Mississippi

UNDER RESOURCE CONSERVATION AND RECOVERY ACT
AND THE SOLID WASTE DISPOSAL LAW

Under the authority set forth above, and the rules promulgated thereunder, the Mississippi Permit Board proposes to deny issuance of a permit to Vertac Chemical Corporation (MSD990714081). This notice announces the availability of the Fact Sheet, required by Mississippi Hazardous Waste Rule 124.8, which sets forth the basis for the proposed decision. The Board will accept comments on its proposed action until July 21, 1986.

The Board will hold a public hearing if a request is received which indicates opposition to this proposal and explicitly sets forth the issues to be raised at the hearing. Alternatively, the Board may on its own initiative hold a hearing if significant interest is shown during the comment period. In any case, if the Board chooses to hold a hearing, another notice will be issued which will delineate the date, time, and place for the hearing.

All comments presented during the comment period will be considered in the formulation of a final decision. For additional information, Jack McMillan of the Division of Solid and Hazardous Waste should be contacted at 961-5171.

Please bring the foregoing to the attention of persons whom you know will be interested.

FILE COPY

June 4, 1986

WQBC AM Radio Station
2845 Clay Street
Vicksburg, Mississippi 39180

Gentlemen:

Enclosed herewith is a legal notice to be broadcast on your station twice daily for three (3) consecutive days beginning June 9, 1986.

After the announcements have been made, please send to me the original and one (1) copy of your bill along with a certification that all six (6) announcements were made.

Sincerely,

Jack McMillan, Director
Division of Solid Waste Management

JM:
Enclosure
cc: Ms. Terry Bailey, BPC

RADIO ANNOUNCEMENT

THE MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES ANNOUNCES THE AVAILABILITY OF INFORMATION RELATED TO ITS PROPOSAL TO DENY A HAZARDOUS WASTE STORAGE PERMIT TO, VERTAC CHEMICAL CORPORATION, RIFLE RANGE ROAD IN VICKSBURG, MISSISSIPPI. THE DEPARTMENT IS ACCEPTING COMMENTS UNTIL JULY 24, 1986, AND WILL HOLD A PUBLIC HEARING IF SIGNIFICANT INTEREST IS SHOWN. IF YOU HAVE ANY QUESTIONS, CONTACT JACK MCMILLAN AT 961-5062.



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

TELEX 53927

April 18, 1986

RECEIVED

APR 21 1986

DEPT. OF NATURAL RESOURCE
BUREAU OF POLLUTION CONTROL

Mr. Jack McCord
Mississippi Department of Natural Resources
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209

Dear Mr. McCord:

The Closure/Post Closure cost estimates are herein adjusted
for inflation:

1985 Costs:

\$1,008,000	Closure
<u>243,200</u>	Post Closure
\$1,251,200	

Inflation Factor:

1.033

Cost to be used for 1986 Trust Fund allocation:

\$1,292,489.60

Best regards,

Dick Karkkainen
Director of Environment and Safety

RDK/bh

cc: J. C. Bumpers
J. L. Hanna
J. Hill

DIVISION OF SOLID WASTE

REVIEWED BY AK

DATE _____

COMMENTS sent to EPA

11-16-87

LOIS -- GROUNDWATER MONITORING -- FINANCIAL -- CLOSURE

MSD990714081 VERTAC CHEMICAL CORP

VICKSBURG

	DATE	OK	COMMENTS
LOIS GW CERTIFICATION SUBMITTED			NOT SUBMITTED
LOIS GW CERTIFICATION REVIEWED			
LOIS ** CERTIFICATION SUBMITTED			NOT SUBMITTED: NO NON SUDDEN INSURANCE
LOIS ** CERTIFICATION REVIEWED			

	NA	REVIEWED	OK	COMMENTS
HYDROGEOLOGICAL DATA				
WELL SYSTEM		85/05/16	Y	
SAMPLING PROGRAM				
GW MONITORING RECORDS				
WAIVER DEMONSTRATION				
QUALITY ASSESSMENT REPORT				
NOTICE OF SIG INCREASE				

	NA	REVIEWED	OK	COMMENTS
CLOSURE ASSURANCE	A			
POST CLOSURE ASSURANCE	A			
SUDDEN LIABILITY	A			
NON SUDDEN LIABILITY	A			

DATE

ATTEMPTING CLEAN CLOSURE
COMMENTS - CLOSING UNITS:

C PLAN REQUESTED
C PLAN SUBMITTED
NOD ON CLOSURE
C PLAN RESUBMITTED
C PLAN DETERMINED ADEQUATE
PUBLIC NOTICED
PUBLIC HEARING HELD
FINAL C PLAN APPROVED
C PROCESS BEGUN
C CERTIFICATION RECEIVED
INSPECTED TO CONFIRM CLOSURE
RELEASED FROM CLOSURE

DATE

CANNOT CLEAN CLOSE - 265 POST CLOSURE REQUIRED.
COMMENTS - P. CLOSURE UNITS:

PLAN REQUESTED
PLAN SUBMITTED
PLAN ON PLAN
PLAN RESUBMITTED
PLAN DETERMINED ADEQUATE
PUBLIC NOTICED
PUBLIC HEARING HELD
FINAL PLAN APPROVED
CLOSURE PROCESS BEGUN
C. CERTIFICATION RECEIVED
INSPECTED TO CONFIRM CLOSURE

DATE

CANNOT CLEAN CLOSE - P. CLOSURE PERMIT REQUIRED. WASTE TAKEN AFTER JULY 26 1982
COMMENTS - P. CLOSURE UNITS:

PART B REQUESTED
PART B RECEIVED
1ST NOD
REVISED PART B RECEIVED
2ND NOD
REVISED PART B RECEIVED
PART B DECLARED COMPLETE
PUBLIC NOTICE
PUBLIC HEARING HELD
PERMIT ISSUED
PERMIT EFFECTIVE

10/11/85 DEPART FINAL

FY 1986 FACILITY STATUS SHEET

GW INFORMATION

2.a. Date Status Sheet Submitted 4/25/86

b. First Time Report Update

1.a. EPA ID: 151077121212181

b. Facility Name: Ventac

If using this form to report on status of groundwater monitoring activities, fill in 3 and 4 as appropriate.

3. Facility Groundwater Monitoring Status A
- D = Detection Monitoring
 - A = Assessment or Compliance Monitoring
 - W = Waiver (Hydrogeologic)
 - X = Well System Not Present
 - N = Not applicable
- Choose one.

more than one Groundwater Monitoring Activity can be reported on a single Status Sheet.

1. Activity Reported with this Submission	Respon. Agency E=EPA S=State	Date Status Determined	Compliance Status Y=Compliance N=Noncompl. (Class I violation only)	Date Report Received	Hazardous Waste Constituent (HWC) Flag Y=HWC in GW N=No HWC in GW
01 Evaluation of Well System				XXXXXXXXXX XXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX
02 Evaluation of Sampling and Analysis Program	S	84-12-14	Y	XXXXXXXXXX XXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX
03 Notice of Significant Increase	S	XXXXXXXXXX XXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX
04 GW Quality Assessment Report	S	85-4-19	XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX	85-4-15	Y
05 Waiver Demonstration (Hydrogeologic)				XXXXXXXXXX XXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX
06 GW Records	S	8-12-14		XXXXXXXXXX XXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX
07 Evaluation of Hydrogeologic Information				XXXXXXXXXX XXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX

COMMENTS: _____

10/11/85 DRAFT FINAL

FY 1986 FACILITY STATUS SHEET
FINANCIAL INFORMATION

DATE STATUS SHEET SUBMITTED 4-25-85
NEW _____ UPDATE ✓

EPA ID: MSD 990714081
FACILITY NAME Vector Chemical

If reporting on Financial Documents, fill in 5 as appropriate.

5. Financial Assurance/Insurance Type	Respon. Agency	Evaluation Status X=Not Applicable N=Not Evaluated	Compliance Status Y=Compliance N=NonCompliance
C= Closure Assurance	<u>S</u>		<u>Y</u>
L= Post Closure Assurance	<u>S</u>		<u>Y</u>
S= Sudden Liability Instrument	<u>S</u>		<u>N</u>
N= Non-Sudden Liability Instrument	<u>S</u>		<u>N</u>
R= Corrective Action Assurance Instrument	<u>S</u>	<u>N</u>	

Comments: _____

LPA ID MSD9907140

For State Use Only

FACILITY NAME Vertac Chemical

4-25-86

C
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PROCESS CODE	AMOUNT	UNIT (CHECK ONE)	
801 CONTAINERS		<input type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
802 STORAGE TANKS	1630000	<input checked="" type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
T01 TREATMENT TANKS		<input type="checkbox"/> GPD	<input type="checkbox"/> LPD
T04 OTHER TREATMENT	1200000	<input checked="" type="checkbox"/> GPD	<input type="checkbox"/> LPD
T03 INCINERATOR		<input type="checkbox"/> TONS/hr <input type="checkbox"/> GAL/hr	<input type="checkbox"/> M TONS/hr <input type="checkbox"/> BTU/hr
803 WASTE PILES		<input type="checkbox"/> Cu Yards	<input type="checkbox"/> Cu Meters
804 STORAGE SURFACE IMPOUNDMENTS	300000	<input checked="" type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
T02 TREATMENT SURFACE IMPOUNDMENTS		<input type="checkbox"/> GPD	<input type="checkbox"/> LPD
D03 DISPOSAL SURFACE IMPOUNDMENTS		<input type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
D09 INJECTION WELLS		<input type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
D00 LANDFILLS		<input type="checkbox"/> ACRE-feet	<input type="checkbox"/> HECTARE-feet
D01 LAND APPLICATION		<input type="checkbox"/> ACRES	<input type="checkbox"/> HECTARES

UNITS ATTENDING CLOSURE

OTHER CLOSURE, POST CLOSURE REQUIRED.

- 02 CLOSURE PLAN REQUESTED
COMMENTS: _____
- 03 CLOSURE PLAN SUBMITTED
COMMENTS: (partial closure?) _____
- 04 NOC ON CLOSURE
COMMENTS: _____
- 09 CLOSURE PLAN RESUBMITTED
COMMENTS: _____
- 05 CLOSURE PLAN DETERMINED NECESSARY
COMMENTS: _____
- 06 PUBLIC NOTICE OF CLOSURE PLAN
COMMENTS: _____
- 07 PUBLIC HEARING HELD
COMMENTS: _____
- 10 FINAL CLOSURE PLAN APPROVED
COMMENTS: (nil/required?) _____
- 11* CLOSURE PROCESS BEGUN
COMMENTS: _____
- 12 CLOSURE CERTIFICATION RECEIVED
COMMENTS: _____
- 13* CLOSURE PERIOD COMPLETED
COMMENTS: _____
- 14* FACILITY RELEASED FROM CLOSURE
COMMENTS: (post closure required?) _____
- 15* DATE INSPECTED TO CONFIRM CLOSURE
COMMENTS: _____

- 02 C/FC PLAN REQUESTED 8/11/14
- 03 C/FC PLAN SUBMITTED
(partial closure?) _____
- 04 NOC SENT
- 09 C/FC PLAN RESUBMITTED
- 05 C/FC PLAN DETERMINED NECESSARY
- 06 PUBLIC NOTICE OF C/FC PLAN
- 07 PUBLIC HEARING HELD
- 10 C/FC PLAN APPROVED
(nil/required?) _____
- 11 CLOSURE PROCESS BEGUN
- 14 CLOSURE CERTIFICATION RECEIVED
- 19 DATE INSPECTED TO CONFIRM CLOSURE
- 17 RELEASED FROM CLOSURE REQUIREMENTS
- 13 FC PROCESS BEGUN

* not requested to be reported for storage or incineration facilities.

C
S
P
C
A
L
L
E
D

PROCESS CODE	AMOUNT	UNIT (CHECK ONE)	
801 CONTAINERS		<input type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
802 STORAGE TANKS	1630000	<input checked="" type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
T01 TREATMENT TANKS		<input type="checkbox"/> GPD	<input type="checkbox"/> LPD
T04 OTHER TREATMENT	1200000	<input checked="" type="checkbox"/> GPD	<input type="checkbox"/> LPD
T03 INCINERATOR		<input type="checkbox"/> TONS/hr <input type="checkbox"/> GAL/hr	<input type="checkbox"/> M TONS/hr <input type="checkbox"/> BTU/hr
803 WASTE PILES		<input type="checkbox"/> Cu Yards	<input type="checkbox"/> Cu Meters
804 STORAGE SURFACE IMPOUNDMENTS	3000000	<input checked="" type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
T02 TREATMENT SURFACE IMPOUNDMENTS		<input type="checkbox"/> GPD	<input type="checkbox"/> LPD
D03 DISPOSAL SURFACE IMPOUNDMENTS		<input type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
D79 INJECTION WELLS		<input type="checkbox"/> GALLONS	<input type="checkbox"/> LITERS
D80 LANDFILLS		<input type="checkbox"/> ACRES-feet	<input type="checkbox"/> HECTARE-feet
D81 LAND APPLICATION		<input type="checkbox"/> ACRES	<input type="checkbox"/> HECTARES

- 1. PWC 3 CALL-IN
- 2. PWC 3 RECEIVED
- 4. RC0 RC01
1st notice of deficiency
2nd notice of deficiency
notice of violation
- 6. APPLICATION COMPLETE
- 13. PUBLIC NOTICE
 draft permit, HSA not applicable
 state permit, HSA portion not included
 joint permit, with compliance schedule
 joint permit, schedule not required
 withdrawn, interim status terminated
- 16. PERMIT DETERMINATION
 issued, HSA not applicable
 issued, HSA portion not included
 issued, with HSA compliance schedule
 issued, schedule not required
 denied
 withdrawn, interim status terminated
- 17. PERMIT EFFECTIVE
- 36. PERMIT EXPIRES
- 22. PERMIT TERMINATED
- 20. PERMIT MODIFIED
 groundwater monitoring
 corrective action
 both GWA and CA
 other
- 23. REQUESTED WITHDRAWAL
 90 day storage
 small quantity generator
 no HSA waste handled now
 protective liner
 closing
- 32. DETERMINATION ON REQUEST
 approved. Closure plan approved.
 approved. No closure required.
 denied

- 37. DOUBLE LINER WAIVER REQUESTED
- 38. DETERMINATION ON WAIVER
 approved
 disapproved
- 39. FACILITY NOT SCREENED
 environmentally significant
 not significant
- 40. FACILITY NOT PLAN APPROVED
- 43. EXPOSURE INFORMATION RECEIVED
- 45. REFERRED FOR HEALTH ASSESSMENT
- 47. SWELL DETERMINATION
 yes, SWELL present
 no, SWELL not present
- 54. HEALTH ASSESSMENT COMPLETE
 remedial inv. necessary
 remedial inv. not required
- 57. REMEDIAL INV. PLAN APPROVED
 as part of permit
 in compliance order
- 58. REMEDIAL INV. COMPLETE
 corrective measures necessary
 corrective measures not required
- 59. CORR. MEASURES PLAN APPROVED
- 62. DETERMINATION OF COMPLIANCE WITH 265.91 and/or 270.14(c)
- 63. MONITORING PROGRAM DEVELOPED
 detection monitoring/permit
 detection monitoring/order
 compliance monitoring/permit
 compliance monitoring/order
 corrective action/permit
 corrective action/order
- *****REQUIRED FROM PERMIT WRITERS*****
- 3. INITIAL REVIEW COMPLETED
- 5. ADDITIONAL INFO RECEIVED
- 80. RC0 TO RC02
- 81. SITE VISIT



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

TELEX 53927

January 9, 1986

RECEIVED

JAN 14 1986

DEPT. OF NATURAL RESOURCE
BUREAU OF POLLUTION CONTROL

Mr. Charles Chisolm
Director
Bureau of Pollution Control
Department of Natural Resources
2350 Highway 80 West
Jackson, MS 39209

Dear Mr. Chisolm:

There will be a structural reorganization of Vertac Chemical Corporation. The Vicksburg facility of Vertac Chemical Corporation will be a part of Cedar Chemical Corporation. Cedar Chemical Corporation will be a sister company to Vertac Chemical Corporation. This letter is a notification of intent to transfer all environmental and operating permits to Cedar Chemical Corporation.

The various permits are listed for reference:

1. RCRA Part A permit number MSD 99071408. Pursuant to 40CFR 270.72(d) a RCRA Part A permit application is attached. The application has been countersigned by Mr. J. C. Bumpers, the Secretary of Cedar Chemical Corporation.
2. NPDES Permit number MS0027995.
3. State Air/Operating permit number 2780-00041.

Very truly yours,

Dick Karkkainen
Director of Environment and Safety

RDK/bh

cc: Mr. Jack Ravan
EPA - Region IV
Atlanta, GA



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

4AW-RM

Mr. R.A. Guidi
Vice President
Vertac Chemical Corporation
Suite 2414 Poplar Avenue
Memphis, Tennessee 38137

Re: Vertac Chemical Corporation
P.O. Box 3
Vicksburg, Mississippi 39180
EPA I.D. No. MSD990714081

Dear Mr. Guidi:

This letter constitutes a formal request for Part B of your application for a hazardous waste facility permit under the Resource Conservation and Recovery Act (RCRA) and the Mississippi Solid Waste Disposal Act for your above referenced facility. This joint request by the Environmental Protection Agency (EPA) and the State of Mississippi, Bureau of Pollution Control, is made under the authority of 40 CFR §122.22(a) and Mississippi Hazardous Waste Regulations Rule No. 122.22(a). Failure to furnish a requested Part B application on time, or to furnish in full the information required in the Part B application, is grounds for termination of interim status under 40 CFR §122.22(a)(5).

The State of Mississippi has been granted Phase II (A and B) Interim Authorization which covers permitting authority for hazardous waste storage facilities (tanks and containers) and hazardous waste incinerators. Mississippi has submitted a final application for Phase II C Interim Authorization (permitting authority for hazardous waste landfills, waste piles, surface impoundments and land farms). Until such time as Mississippi's Phase II C Interim Authorization application is approved, EPA retains full and ultimate responsibility for issuing permits to hazardous waste land disposal facilities in the State. However, because Mississippi's Phase II C Interim Authorization application is under review, the State and EPA will review your permit application concurrently. If Mississippi receives Phase II C Interim Authorization prior to issuance of your permit, EPA will not take official action on your permit application but will defer the permit issuance/denial decision to the State.

Enclosed is a copy of the regulations which set forth the information required in the Part B application for your facility. The completed Part B application must be submitted to EPA no later than six (6) months from the date of this request. Please send three (3) copies of the Part B application to Mississippi and four (4) copies to EPA. The mailing addresses for the two agencies are as follows:

Environmental Protection Agency
345 Courtland Street
Atlanta, Georgia 30365
Attention: James H. Scarbrough

Division of Solid/Hazardous Waste Management
Mississippi Department of Natural Resources
P.O. Box 10385
Jackson, Mississippi 39209
Attention: David Lee

In accordance with 40 CFR Part 2, you may claim certain information in your Part B application as confidential if such claim can be substantiated. In order to claim information confidential you should:

1. Determine whether or not the claim of confidentiality can be substantiated; substantiate it (concerning each type of information claimed) by addressing the applicable elements of 40 CFR §2.208, a copy of which is enclosed;
2. Precisely describe which information is claimed as confidential or stamp each page that contains such information with the words "Confidential" or "Confidential Business Information;"
3. Package all pages containing confidential information separately from your total Part B application package. This means that your Part B submittal would consist of two packages: (a) the Part B application without confidential information, and (b) the portion of your Part B application that has been claimed as confidential; and
4. State clearly in your transmittal letter that confidential information is included.

If no claim of confidentiality is made at the time of submission, EPA may make the information available to the public without further notice.
If a claim is asserted and substantiated, the information will be treated in accordance with the procedures in 40 CFR Part 2 (Public Information).

In the near future, EPA will be holding a training course on "How to Prepare a Part B Permit Application for a Hazardous Wastes Land Disposal Facility." We will notify you of the time and date of this training seminar. A guidance manual on preparing Part B applications is also available. If you will contact our office, we will be glad to send you one.

If you plan to withdraw your Part A application and terminate your interim status, or modify your Part A application in such a way that the land disposal regulations do not apply to your facility, your request for withdrawal or modification should be submitted to EPA within 30 days of the date of this letter.

Should you have any questions concerning these requirements, please contact Mr. David Lee, Mississippi Division of Solid/Hazardous Waste Management, at (601) 961-5171 or Mr. Doug McCurry of EPA at (404) 881-3433.

Sincerely yours,

John A. Little, Deputy

for Charles R. Jeter
Regional Administrator

Charles H. Chisolm

Charles H. Chisolm, Director
Bureau of Pollution Control
Mississippi Department of Natural
Resources

Enclosure

cc: Mr. Jack M. McMillan, Director
Division of Solid/Hazardous Waste Management
Mississippi Department of Natural Resources
P.O. Box 10385
Jackson, Mississippi 39209

Mr. Fred Ahlers
Plant Manager
Vertac Chemical Corporation
P. O. Box 3
Vicksburg, Mississippi 39186

FILE COPY

November 14, 1985

Mr. Dick Karkkainen
Vertac Chemical Corporation
24th Floor, 5100 Poplar
Memphis, Tennessee 38111

Mr. John G. Hill
Vertac Chemical Corporation
P. O. Box 3
Vicksburg, Mississippi 39180

Gentlemen:

Re: Part B Application

In a recent review of portions of your RCRA Part B Permit Application we found several deficiencies that must be addressed, and have the following comments and requests for additional information:

Closure and Post-Closure Plan

1. The Closure Plan does not state to what levels the equipment used in closure will be decontaminated. It is also necessary to submit the analysis procedures that will be used to demonstrate that the decontamination levels have been reached.
2. The Closure Plan must specify the sampling and analysis techniques for the samples taken from the sediment, base, and sidewalls of the ponds prior to the start of closure activities.
3. Equipment associated with the operation of the impoundment such as discharge and inlet pipes, pumps, and hoses are to be decontaminated or disposed of. If the equipment is to be decontaminated and reused the method of decontamination must be specified along with the method of demonstrating that decontamination is successful.
4. The post-closure plan lacks the required maintenance and inspection procedures and schedules for the groundwater monitoring system. Frequency of inspections should be stated.
5. The system of drain pipes and slide gates used to isolate the site during a 100 year flood must be inspected regularly.
6. The name, address, and phone number of the person responsible for maintaining and updating of the post-closure plan both prior to, and during post-closure must be included.

Mr. Dick Karkkainen and
Mr. John G. Hill
November 14, 1985
Page -2-

7. In accordance with MHW 264.119, the survey plat submitted to local land use authority and the EPA Regional Administrator must be prepared and certified by a professional land surveyor. In addition, the locations and dimensions of the surface impoundment must be with respect to permanent surveyed benchmarks. The plat must also contain a prominently displayed notice stating the owner or operator's obligation to restrict disturbance of the site as specified in MHW 264.117(c).
8. The notation on the deed must include notice that use of the land is restricted to activities as specified in MHW 264.117(c). The notation must address the requirements stated in MHW 264.119 regarding notification of the local land use authority.
9. The post-closure cost estimate must include provisions for administrative costs, inspection costs, and hourly labor costs.
10. The application lacks certificates of liability insurance for both sudden and non-sudden accidental occurrences.
11. The application must include certification as specified in MHW 270.11 signed by a responsible corporate officer.

Security, Contingency Plan and Personnel Training

1. The following changes of inspection schedules are necessary:
 - a. First aid equipment to be inspected weekly.
 - b. Emergency horns to be tested monthly.
 - c. Protective clothing needs to be inspected monthly.
 - d. The dike surrounding the impoundment should be inspected for deterioration after storms.
2. The application must include a statement that incompatible wastes and materials are not stored in the same surface impoundment.
3. The list of emergency equipment, communication and alarm systems, and decontamination equipment must include a brief outline of the capabilities of each piece of equipment.
4. A statement authorizing the designated emergency coordinators to commit the necessary resources to implement the contingency plan must be included.
5. The hazardous waste training program must document that the program is directed by a person trained in hazardous waste management.

Mr. Dick Karkkainen and
Mr. John G. Hill
November 14, 1985
Page -3-

The preceding changes should be made and submitted to this office no later than January 10, 1986.

In addition, the following schedule must be adhered to in complying with groundwater corrective action requirements as specified in MHWB Parts 264 and 270.

1. January 10, 1986 - Submit a report to this office that satisfies the following requirements:
 - a. Identifies the source of contamination.
 - b. Identifies the extent of contamination including location of the plume and contamination levels throughout the plume.
 - c. Characterizes the aquifer.
2. May 16, 1986 - Submit a draft Groundwater Corrective Action Plan to this office for approval.
3. June 16, 1986 - Submit the finalized Groundwater Corrective Action Plan and begin its implementation.

On November 20, 1985, the staff of the Bureau of Pollution Control will recommend to the Mississippi Commission on Natural Resources that the compliance dates mentioned in the preceding letter be incorporated into a Commission Order.

If you have any questions or comments regarding these matters, please contact us at 961-5171.

Sincerely,

Jack McMillan, Director
Division of Solid Waste Management

JBM:els



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

TELEX 53927

November 7, 1985

Mr. James H. Scarbrough, P.E.
Chief, Residuals Management Branch
Waste Management Division
U. S. EPA
345 Courtland Street, N.E.
Atlanta, GA 30365

RECEIVED

NOV 8 1985

DEPT. OF NATURAL RESOURCE
BUREAU OF POLLUTION CONTROL

Mr. Jack M. McMillan
Director, Division of Solid Hazardous
Waste Management
Mississippi Department of Natural Resources
P. O. Box 10385
Jackson, MS 39209

RE: Certification: EPA I.D. Number MSD0990714081;
Surface Impoundment for Storage of Rainwater
Prior to Discharge of Rainwater Through Activated
Carbon to the Mississippi River Under NPDES
Permit Number MS0027995

Gentlemen:

We certify that the referenced surface impoundment is in compliance with:

1. all applicable ground-water monitoring requirements.
2. the closure/post closure trust fund provisions of financial responsibility requirements.
3. requirements for submission of a Part B operating permit application.

Vertac has comprehensive general liability (CGL) insurance coverage, including umbrella coverage, totaling \$11,000,000. Each policy includes a so called "Pollution Exclusion" endorsement. We understand that such exclusions are uniformly included in CGL policies currently available to chemical manufacturers. It is not readily apparant to us that the pollution exclusion prevents certification of compliance with RCRA insurance requirements. We are advised by legal counsel that the majority of court cases involving the scope of such exclusions have found coverage for what might appear to be injuries and damages caused by "pollution" incidents.

Your letter of November 1, 1985 requests additional information. The additional information is provided:

1. The referenced surface impoundment or pond is located on attached sketches a(19)I, a(19)II, a(19)III and a(19)IV.

2. The referenced surface impoundment or pond is the unit of interest.

3. A closure plan for the referenced surface impoundment was submitted on June 18, 1985 as part of our RCRA Part B permit application.

4. a. The referenced surface impoundment or pond was denoted a RCRA surface impoundment by virtue of its general use as a secondary spill containment structure. Spills of the commercial pesticide dinitrobutylphenol could flow to the pond. During a typical day there were no spills; therefore, we have no information on the average rate of spills into the pond.

b. As of November 8, 1985 the surface impoundment will not receive hazardous waste.

c. There will be no hazardous waste placed in the unit between November 8, 1985 and December 31, 1985.

d. Any spills of the commercial pesticide are to be localized at the point of spill, placed or pumped into appropriate containers or containment vessels and disposed at an appropriately permitted hazardous waste facility.

5. The spills previously noted will be stored on-site for less than 90 days.

- i. the type of storage will for now be drums or vessels
- ii there is none presently in storage.
- iii the rate of generation is unknown, but expected to be very small.

A. The waste will be shipped to off-site facilities, including:

1. Lamberton Chemical Resources in Oklahoma.
2. Gibraltar Chemical Resources in Texas.
3. Rollins in Louisiana.

or treated on-site in our above ground totally contained activated carbon treatment system.

B. If hazardous waste is placed in the surface impoundment a report will be submitted within 5 days to the EPA. The report will include:

1. date of spillage
2. amount of spillage
3. circumstances of the event.

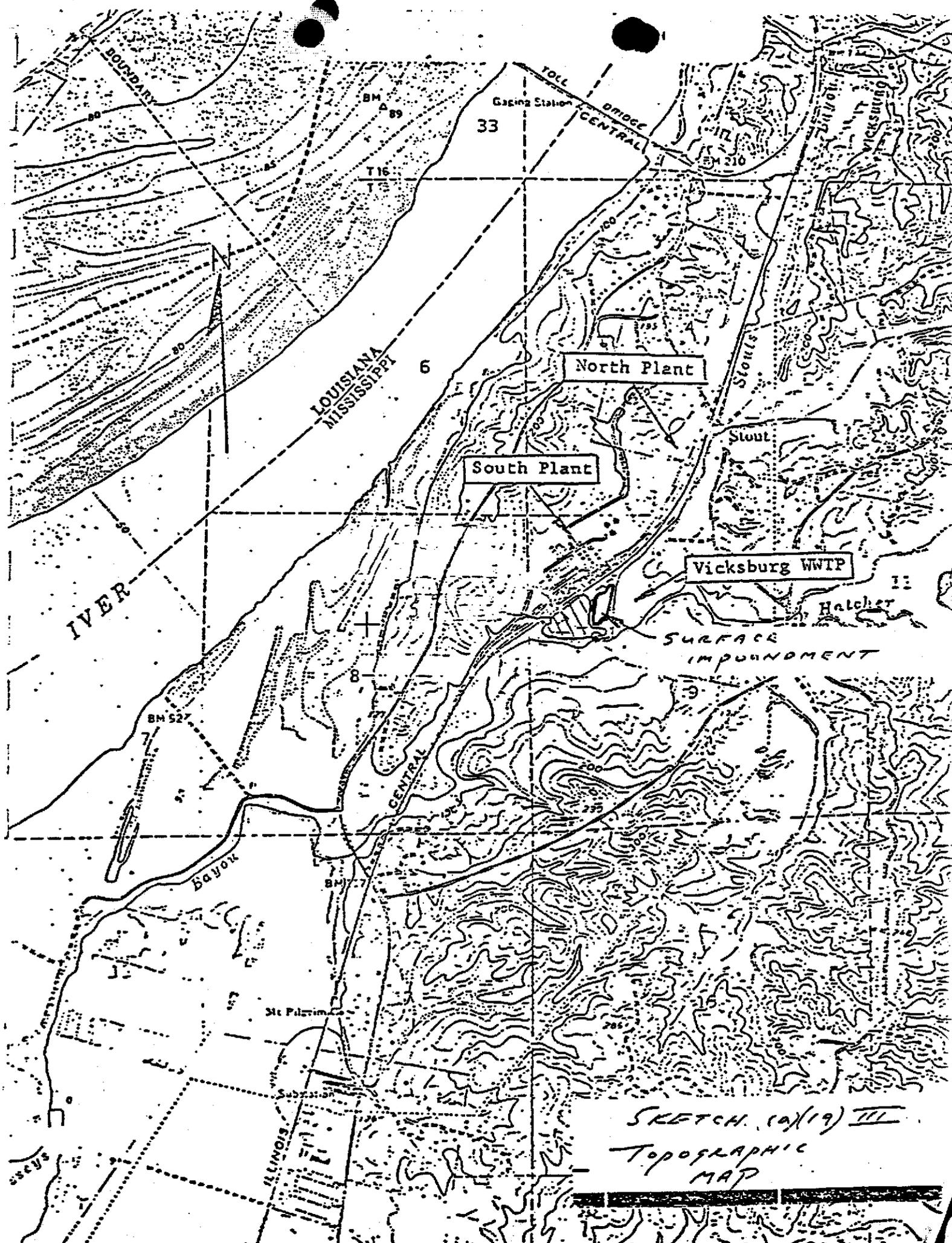
Very truly yours,



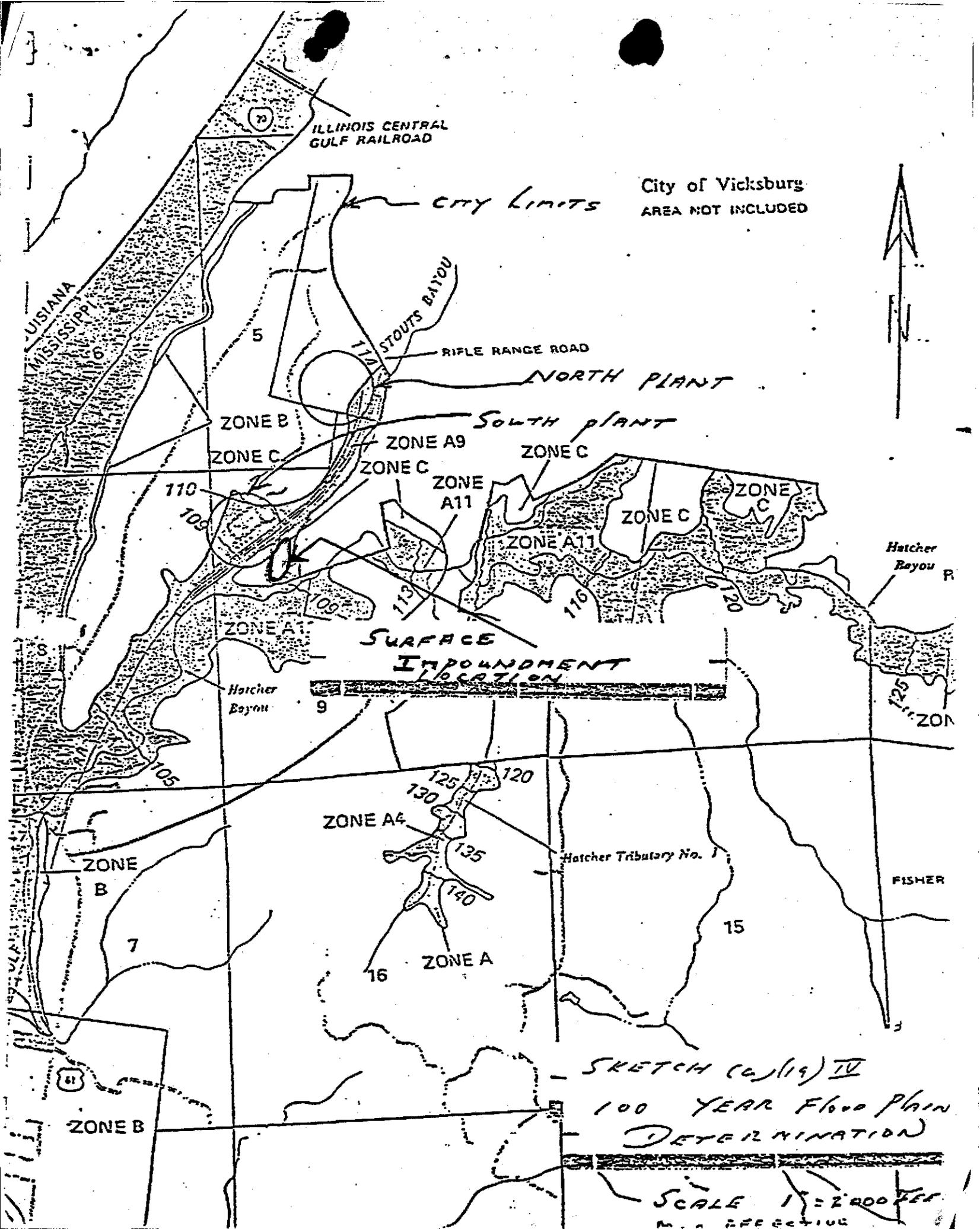
Dick Karkkainen
Director of Environment and Safety

RDK/bh

cc: F. L. Ahlers
C. P. Bomar
J. C. Bumpers
R. A. Guidi
J. G. Hill
A. T. Malone



SKETCH (a)(19) III
TOPOGRAPHIC
MAP



ILLINOIS CENTRAL
GULF RAILROAD

City of Vicksburg
AREA NOT INCLUDED

city limits

MISSISSIPPI

5

STOUTS BAYOU

RIFLE RANGE ROAD

NORTH PLANT

ZONE B

SOUTH PLANT

ZONE C

ZONE A9

ZONE C

110

ZONE C

ZONE A11

ZONE C

ZONE C

109

ZONE A1

SURFACE
IMPOUNDMENT
LOCATION

Hatcher
Bayou R

Hatcher
Bayou

9

FISHER

105

ZONE A4

Hatcher Tributary No. 1

FISHER

ZONE B

7

16

ZONE A

15

SKETCH (6) (19) IV
100 YEAR Flood Plain
DETERMINATION

61

ZONE B

SCALE 1" = 200 FEET
NOT EFFECTIVE

FILE COPY

September 24, 1985

Mr. John Hill
Vertac Chemical Corporation
P. O. Box 3
Vicksburg, Mississippi 39180

Dear Mr. Hill:

Re: Corrective Action Plan
MSD990714081

We have reviewed your letter of September 16, 1985. The proposed actions appear appropriate to develop the field data for a corrective action program. It would appear that an additional well between MW-1 and the surface impoundment could provide valuable data and help better define any groundwater contamination around MW-1. We believe this should be considered.

We are planning to place Vertac under a compliance schedule to carry-out the corrective action plan. The proposed corrective action schedule in Section E-3 of the latest Part B submittal calls for the design and implementation to be completed by June 15, 1986. This date appears to be too long. We would like to meet with you and your consultants at your convenience to discuss the proposed schedule.

Please contact our office should you have any questions concerning these matters.

Sincerely,

Charles Estes, P. E.
Hazardous Waste Section

CE:els

SEP 12 1985

4WD-WC

RECEIVED

SEP 15 1985

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

DEPT. OF NATURAL RESOURCE
BUREAU OF POLLUTION CONTROL

Mr. Fred Ahlers
Plant Manager
Vertac Chemical Corporation
Post Office Box 3
Vicksburg, Mississippi 39180

Re: Notice of Violation
Vertac Chemical Corporation - Vicksburg, MS
EPA ID No.: MSD 990 714 081

Dear Mr. Ahlers:

We are in receipt of your Part B Application for the Hazardous Waste Facility Permit. This represents your application for a final determination regarding a permit under Section 3005(c) of the Resource Conservation and Recovery Act (RCRA).

40 CFR Part 270.10(j)(2) requires that by August 8, 1985, owners and operators of a landfill or a surface impoundment who have already submitted a Part B application must submit the exposure information required in 40 CFR Part 270.10(j)(1) which states:

"After August 8, 1985, any Part B permit application submitted by an owner or operator of a facility that stores, treats, or disposes of hazardous waste in a surface impoundment or a landfill must be accompanied by information, reasonably ascertainable by the owner or operator, on the potential for the public to be exposed to hazardous wastes or hazardous constituents through releases related to the unit.

At a minimum, such information must address:

- "(1) reasonably foreseeable potential releases from both normal operations and accidents at the unit, including releases associated with transportation to or from the unit;
- "(2) the potential pathways of human exposure to hazardous wastes or constituents resulting from the releases described under paragraph (1); and
- "(3) the potential magnitude and nature of the human exposure resulting from such releases."

DIVISION OF SOLID WASTE

REVIEWED BY 10-18-85

DATE 10-18-85

COMMENTS _____

COMMENTS _____

DATE _____

REVIEWED BY _____

DIVISION OF SOFT MATS

On August 8, 1985, your Exposure Information and Health Assessment was due to be received by this office to satisfy the requirements of 40 CFR 270.10. This office has not received the required documents. Therefore, as of August 8, 1985, your facility is in violation of 40 CFR 270.10(j)(2).

Please submit the required Exposure Assessment within fifteen (15) days of receipt by certified mail of this notice. Failure to submit the above information within the specified time frame may result in the issuance of an Administrative Order pursuant to §3008(a) of RCRA and the assessment of a civil penalty.

If you have any questions, please contact Allan Antley at 404/881-4552.

Sincerely yours,

/s/ Thomas W. Devine

Thomas W. Devine
Director
~~Waste Management Division~~

cc: Mr. Jack M. McMillan, MSDNR



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

RECEIVED

SEP 19 1985

REPLY TO: P. O. BOX 3
VICKSBURG, MS 39180
(601) 636-1231

Mr. Charles Estes, P.E.
Hazardous Waste Section
Mississippi Department of
Natural Resources
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**
DEPT. OF NATURAL RESOURCES
BUREAU OF POLLUTION CONTROL

September 16, 1985

Dear Mr. Estes:

According to the corrective action plan outlined in Section B-3 of our RCRA Part B Application, the first three action items to be implemented upon the completion of the Appendix VIII analysis of the groundwater well samples are:

- 1) Identify the source of contamination
- 2) Identify the extent of contamination.
- 3) Characterize the aquifer.

In order to implement this action plan, we propose the following:

- 1) Continue collecting and compiling data on groundwater levels from all existing (and proposed) monitoring wells and piezometers.
- 2) Install and develop four additional groundwater monitoring wells, located as shown on the attached Figure 1. Undisturbed soil samples will be collected from each well for determination of Atterberg Limits, falling head permeability, void ratio and porosity values.
- 3) Water level recovery tests will be run on Well Nos. 1, 6, 11, and 12.
- 4) Well Nos. 9, 10, 11, and 12 (the new wells) will be analyzed for DNB.

These proposed measures will simultaneously implement the action items as specified in the Corrective Action Plan. The Bureau's prompt review and comment will be appreciated. If you have any questions, please feel free to give me a call.

Sincerely,

John G. Hill
Environmental Engineer

JGH/lld
Enc.

cc - F. Ahlers, D. Karkkainen

LEGEND

Existing Monitoring Well: ⊕

Proposed Monitoring Well: ⊗



June 18, 1985

Mr. Dick Karkkainen
Vertac Chemical Corporation
24th Floor, 5100 Poplar
Memphis, Tennessee 38111

FILE COPY

Dear Mr. Karkkainen:

Re: Part B Application for MSD990714081

As requested by your letter of May 28, 1985, we are granting an extension of the Part B resubmittal date for May 29, 1985 to June 19, 1985. This is to enable Vertac Chemical to submit a more complete closure plan and Part B.

Should you have any questions, please contact our office.

Sincerely,

Charles Estes, P. E.
Division of Solid Waste Management

CE:cm



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

APR 11 1985

CERTIFIED MAIL

RETURN RECEIPT REQUESTED

4WD-RM

Mr. Dick Karkkaien
Vertac Chemical Corporation
Suite 2414
5100 Poplar Avenue
Memphis, Tennessee 38137

Re: Vertac Chemical Corporation
EPA I.D. Number MSD 990 714 081

Dear Mr. Karkkaien:

The purpose of this letter is to formally notify you of certain requirements brought about by the Hazardous and Solid Waste Amendments of 1984 (HSWA) that may apply to your facility.

Enclosed is a Fact Sheet that summarizes the new RCRA permitting requirements that apply to hazardous waste facilities. There are two of the requirements in particular to which we want to call your attention. These are both described on page 5 of the enclosed Fact Sheet. They are:

- (1) New units and/or lateral expansions or replacements of existing units that receive waste after May 8, 1985, must meet the double liner and leachate collection requirements as described on page 5. We have also enclosed some information which describes what a new unit, replacement unit or lateral expansion is. In addition you are required to submit a notification to EPA at least 60 days prior to receiving wastes into such units and submit your Part B application within 6 months of this notification (unless your Part B application has previously been called in and is due earlier).
- (2) After May 8, 1985, you will not be able to dispose of bulk or noncontainerized liquid hazardous waste or free liquids contained in hazardous wastes (regardless of whether or not absorbents have been added) in your landfill. After November 8, 1985, you will not be able to dispose of non-hazardous liquid wastes in your landfill.

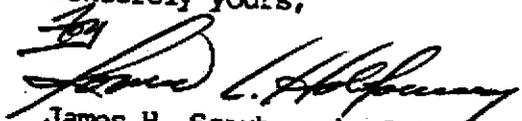
The requirements of the Hazardous and Solid Waste Amendments of 1984 are effective in all states regardless of whether the state hazardous waste program has received authorization under RCRA. These requirements will be administered independently by EPA until such time as they have been incorporated into the state's program and approved by EPA. The state hazardous waste agency will be working with EPA to monitor compliance with these requirements.

The notification previously mentioned that must be submitted at least 60 days prior to receipt of wastes in new units, replacement units or lateral expansions of existing units should be submitted to the EPA Regional Office as follows with a copy to the state hazardous waste agency.

James H. Scarbrough, P.E., Chief
Residuals Management Branch
Waste Management Division
U.S. Environmental Protection Agency
Region IV
345 Courtland Street N.E.
Atlanta, Georgia 30365

Any questions regarding these requirements should be directed to the Waste Engineering Section of this Branch at (404) 881-3433.

Sincerely yours,



James H. Scarbrough, P.E., Chief
Residuals Management Branch
Waste Management Division

Enclosures



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

TELEX 53927

May 28, 1985

Mr. Charles Estes
Mississippi Department of Natural Resources
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209

Dear Mr. Estes:

This is written confirmation of the conversations between you and Mr. Gradet of IT Corporation.

We will miss the deadline for resubmittal of Part B information so that we may submit a draft closure plan. We will then prepare a revised Part B, presumably in an acceptable format, by June 19, 1985.

Best regards,

Dick Karkkainen
Director of Environment and Safety

RDK/bh

cc: A. Gradet
J. Hill



May 23, 1985

RECEIVED

JUN 10 11 5 10

Project No. HE-1034

Charles Estes
Environmental Engineer
Bureau of Pollution Control
Mississippi Department of Natural Resources
P.O. Box 10385
Jackson, Mississippi 39209

Vertac Chemical Corporation
Vicksburg, Mississippi
Part B Permit Application
CIB #MS0990714081

Dear Mr. Estes:

In accordance with our telephone conversation on May 22, 1985, I would like to request an extension of the deadline for responding to your request for additional information on the above referenced permit application (letter to Dick Karkkainen, Vertac Chemical Corporation from Jack McMillan, dated March 29, 1985 attached for reference). As we discussed I would like to respond to your request in the following manner:

- (a) Prepare draft revised closure and post-closure plans for your review. Most of the substantive comments in the March 29 letter involve closure and post-closure plan details. We would submit the draft plans on June 3, 1985. Should there still be major deficiencies or inadequacies we would be prepared to meet with you at your convenience.
- (b) We will submit the revised/reorganized Part B application by June 17, 1985. This would include the revised closure and post-closure plan as well as a response to Item 7 of the March 29 letter.

I hope you are able to agree to this revised schedule. If you have any questions, please contact me at (713) 784-2800.

Sincerely

Alan Gradet
Project Manager

cc: R. D. Karkkainen
J. Hill

Regional Office

IT Corporation • 2925 Briarpark • Suite 405 • Houston, Texas 77042 • 713-784-2800

STATUS OF COMPLIANCE WITH RCRA GROUNDWATER MONITORING REQUIREMENTS

FACILITY NAME: Vertac Chemical Corporation EPA ID NO. MSD-990-714-081

LOCATION: Vicksburg, MS

3rd NOD sent 2/28/85

CATEGORY: 1 INTERIM STATUS: YES PART B STATUS: Awaiting assessment results

GROUNDWATER CONTAMINATION: YES - Conducted App. VIII analyses, found dinitro butylphenol in Well #1. Also, sporadically detecting atrazine.

CURRENT STATUS:

1. Compliance- In compliance with Part 265 Subpart F.
2. Technical Deficiencies- Facility should submit t-test calculations. T-test is being conducted, but no calculations are in the facility file.

ACTION/RECOMMENDATIONS:

1. Compliance/Enforcement- Track state progress on Part B.
2. Technical/Information needs- Submit t-test calculations with groundwater monitoring reports.
3. Corrective Action- §3008(h)

BACKGROUND INFORMATION:

1. Facility Description/Waste Types- Produces agricultural chemicals. Wastes: 2, 4 - dinitro - 6 - methylphenol, methyl parathron, chloroform, xylene.
2. Unit Type(s)- 1 surface impoundment
1 "inactive disposal area capped in 1983", not presently regulated. Contiguous with impoundment, monitored by existing wells.
3. Compliance History- BPC order 717-84, 6/11/84: Order to submit groundwater assessment program and submit revised Part B - Due 8/30/84 - submitted 9/30/84.
4. Closure/Post Closure- Closure/post-closure will be under 270.
5. CERCLA Status- none noted

MATERIALS REVIEWED: Part A X Part B EPA Compliance Files

State Files X Other

Prepared By: Joe Hughart Date: 5/16/85



VERTAC CHEMICAL CORPORATION

RECEIVED
24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

MAR 30 1985 11 31 AM

March 29, 1985

REPLY TO: P. O. BOX 3
VICKSBURG, MS 39180
(601) 636-1231

MISSISSIPPI DEPARTMENT
OF SOLID WASTE
CONTROL

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Jack M. McMillan, Director
Division of Solid Waste Management
Bureau of Pollution Control
2350 Highway 80 West
Jackson, MS 39209

Dear Mr. McMillan:

Per your request, attached is the completed form, "Information Regarding Potential Releases from Solid Waste Management Units". We have attempted to compile and present the information requested in a complete and concise manner.

If you have any questions, please feel free to give me a call.

Sincerely,

John G. Hill
Environmental Engineer

JGH/ld
Attachment

cc - F. L. Ahlers
- R. Karkkainen

**INFORMATION REGARDING POTENTIAL RELEASES FROM
SOLID WASTE MANAGEMENT UNITS**

FACILITY NAME: Vertac Chemical Corporation

EPA I. D. NUMBER: MSD 990714081

LOCATION **City** Vicksburg

State Mississippi

1. Are there any of the following solid waste management units (existing or closed) at your facility? NOTE - DO NOT INCLUDE HAZARDOUS WASTES UNITS CURRENTLY SHOWN IN YOUR PART B APPLICATION

	<u>YES</u>	<u>NO</u>
• Landfill	<u>X</u>	<u> </u>
• Surface Impoundment	<u>X</u>	<u> </u>
• Land Farm	<u> </u>	<u>X</u>
• Waste Pile	<u> </u>	<u>X</u>
• Incinerator	<u> </u>	<u>X</u>
• Storage Tank (Above Ground)	<u>X</u>	<u> </u>
• Storage Tank (Underground)	<u> </u>	<u>X</u>
• Container Storage Area	<u>X</u>	<u> </u>
• Injection Wells	<u> </u>	<u>X</u>
• Wastewater Treatment Units	<u>X</u>	<u> </u>
• Transfer Stations	<u>X</u>	<u> </u>
• Waste Recycling Operations	<u> </u>	<u>X</u>

2. If there are "Yes" answers to any of the items in Number 1 above, please provide a description of the wastes that were stored, treated or disposed of in each unit. In particular please focus on whether or not the wastes would be considered as hazardous wastes or hazardous constituents under RCRA. Also include any available data on quantities or volumes of wastes disposed of and the dates of disposal. Please also provide a description of each unit and include capacity, dimensions, location at facility, provide a site plan if available.

See attached Table.

NOTE: Hazardous waste are those identified in 40 CFR 261. Hazardous constituents are those listed in Appendix VIII of 40 CFR Part 261.

3. For the units noted in Number 1 above and also those hazardous waste units in your Part B application, please describe for each unit any data available on any prior or current releases of hazardous wastes or constituents to the environment that may have occurred in the past or still be occurring:

Please provide the following information

- a. Date of release
- b. Type of waste released
- c. Quantity or volume of waste released
- d. Describe nature of release (i.e., spill, overflow, ruptured pipe or tank, etc)

See attached Table.

4. In regard to the prior releases described in Number 3 above, please provide (for each unit) any analytical data that may be available which would describe the nature and extent of environmental contamination that exists as a result of such releases. Please focus on concentrations of hazardous wastes or constituents present in contaminated soil or groundwater.

See attached Table.

Signature and Certification

As with reports in RCRA Permit Applications, submittal of this information must contain the following certification and signature by a principal executive officer of at least the level of Vice President or by a duly authorized representative of that person:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.


Signature

Fred L. Ahlers, General Manager
Name and Title (Typed)

ITEM	Present at Facility ①	DESCRIPTION OF WASTE	QUANTITY of WASTE	DATES OF OPERATION	DESCRIPTION OF UNIT	Site Location ②	PRIOR/CURRENT RELEASE OR COMMENTS
<u>Landfill</u> Inactive Landfill	Yes	Cyanuric chloride, Dimethyl urea and Isopropyl amine, PCl_3 , $PSCl_3$, $PS(CH_3)_2Cl$, Sodium Nitrophenylate, Spent Activated Carbon	172 drums 30 " 80 " 31 " 17 "	From approx. 1975 until early 1980.	Size unknown. Dug earth.	A	None
<u>Surface Impoundment</u> North Plant	Yes	Process water, rain water, boiler & cooling tower blow-downs from KNO_3 plant.	0.36MGD (1984 avg.)	≈ 1962 to present	Surge pond for NPDES treatment/pH control. Dug earth.	B	Continuous release to surface water via NPDES Permit.
South Plant Pond	No	-	-	-	-	C	Listed in Part B Application. Release to surface water due to dike failure 2/5/83. All information available currently in MS DNR file.

1) Excludes units shown in part "B" application.

2) See attached Figure 1.

ITEM	Present at Facility ①	DESCRIPTION OF WASTE	QUANTITY of WASTE	DATES OF OPERATION	DESCRIPTION OF UNIT	Site Location ②	PRIOR/CURRENT RELEASE or COMMENTS
South Plant Hill <u>Land Farm</u> <u>Waste Pile</u> <u>Incinerator</u> <u>Storage Tank (above ground)</u>	Yes No No No	DNBW Wash Water	Unknown	Approx. 1975 until 1980	Size Unknown Dug Earth	D	Intermittent release to surface water via NPDES Permit
Hill Tank	Yes	DNBW Waste Water	2.5mmgal yr.	1980 to present	1.6mm gallons carbon steel tank	E	Continuous release to surface waters via NPDES Permit and off-site deep-well disposal.

1) Excludes units shown in part "B" application.

2) See attached Figure 1.

ITEM	Present at Facility ①	DESCRIPTION OF WASTE	QUANTITY of WASTE	DATES OF OPERATION	DESCRIPTION OF UNIT	Site Location ②	PRIOR/CURRENT RELEASE or COMMENTS
Blue Tank	Yes	DNBP Waste Water	Unknown	Early 1983 to present	16 m gallon Fiberglass Tank	F	Infrequent small leaks to south plant drainage/spill collection system. Continuous release to off-site deepwell.
North River Tank	Yes	} DNBP Waste Water	1.1mm gal/yr (1984)	Jan/84 to Present	24m gal steel tank	G	Continuous release to surface water via NPDES Permit.
South River Tank	Yes	}			16m gal steel tank		
MSMA Drain Water	Yes	Rainwater and floor Drains	Unknown	Jan./83 to July/84	10m gal carbon steel tank	H	No releases
CMU 4-2000 Waste tk #1 Waste tk #2 Waste tk #3	Yes Yes Yes	} DEHPA Wastewater	0.4mm gal (1 time)	Aug./84 to Feb./85	27m gal } 14m gal } 11m gal }	I	Material released to off-site deepwell.
Atrazine Waste Tank #1 Tank #2	Yes Yes	} Atrazine Waste } Water	Unknown	Mar./75 to Dec./79	14m gal } carbon 14m gal } steel } tanks	J	Continuous release to surface waters via NPDES Permit.

1) Excludes units shown in part "B" application.

2) See attached Figure 1.

ITEM	① Present at Facility	DESCRIPTION OF WASTE	QUANTITY of WASTE	DATES OF OPERATION	DESCRIPTION OF UNIT	② Site Location	PRIOR/CURRENT RELEASE or COMMENTS
Storage Tank (below ground)	No						
Container Storage Area							
Behind Atrazine	Yes	Misc. drummed waste	533 drums for 1983 and 1984	Dec./79 to Present	Roofed, curbed, concrete floor	K	Drummed material sent to approved landfill as necessary.
Beside UDMH	No	-	-	-	-	L	Described in Part B application
Behind Auto Shop	Yes	Waste Oil	4000gal yr.	Current	Concrete pad with drums	M	Removed regularly for recycle. Drums returned for credit.
South End of North Plant	Yes	Waste Oil	4000gal yr.	Current	Concrete pad with drums	N	- as above -
East of Large Cooling Tower	Yes	Misc. Drummed Waste	Unknown	Unknown-not current	Gravel pad with drums	O	Removed to approved landfile.
Injection Wells	No						

1) Excludes units shown in part "B" application.

2) See attached Figure 1.

ITEM	Present at Facility ①	DESCRIPTION OF WASTE	QUANTITY of WASTE	DATES OF OPERATION	DESCRIPTION OF UNIT	Site Location ②	PRIOR/CURRENT RELEASE or COMMENTS
<u>Wastewater Treatment Units</u>	No						
pH Control @ North Plant	Yes	Process water, rainwater, boiler & cooling water blowdown from KNO ₃ plant	0.36MGD (1984 avg)	≈ 1962 to present	Caustic addition to in-line mixer on pH control	P	Continuous release to surface waters via NPDES Permit
pH Control @ South Plant	No	-	-	-	-	Q	Listed in Part "B" Application
Calgon Columns	No	-	-	-	-	R	-as above-
MSMA Flash Pot	Yes	Rainwater & floor drains from MSMA plant	Unknown	Jan./83 to July/84	6m gal carbon steel tank with 2mm BTU/hr. heater	S	Intermittent release of underflow material drummed and sent to approved landfill.
M. Parathion Resin System	Yes		Approx. 20 gpm	Sept.77 to Mar./78	Two 75 ft ³ resin bed adsorbers	T	Continuous release to surface water via NPDES Permit
pH Control @ Atrazine	Yes	Atrazine Wastewater	≈0.07MGD	Mar./75 to Dec./79	Caustic addition to 12m gal tank	U	Continuous release to surface water via NPDES Permit
Atrazine Wastewater Filter	Yes	Atrazine Wastewater	≈0.07MGD	Mar./75 to Dec./79	3'x5' pressure leaf filter	V	As above. Solids returned to process

1) Excludes units shown in part "B" application.

2) See attached Figure 1.

ITEM	Present at Facility ①	DESCRIPTION OF WASTE	QUANTITY of WASTE	DATES OF OPERATION	DESCRIPTION OF UNIT	Site Location ②	PRIOR/CURRENT RELEASE or COMMENTS
<u>Transfer Station</u>							
MSMA salt cake	Yes	MSMA salt cake	6.2mm lb	Jan/83 to July/84	Roll-off dumpster	W	Material sent to approved landfill.
Waste Recycling Operation	No						

1) Excludes units shown in part "B" application.

2) See attached Figure 1

Chuck

BLUEPRINT

For Documenting Compliance
with the
RCRA Amendments of 1984
February 1, 1985

Facility Name: Vertac Chemical I.D. # MSD 990714081

Mailing Address (Facility and Corporate): P.O. Box 3, Vicksburg, MS 39180

(Corporate) 24th Floor, 5100 Poplar,
Memphis, TN 38137

Facility Contact: (Vicksburg) John Hill, (Memphis) Dick Korkkainen

I. Effect of RCRA Amendments on Facility

A. Due to the change in the definition of "regulated unit," is the facility subject to corrective action for groundwater contamination?

Yes ~~___~~ No Don't Know ___

Comments _____

B. Is facility "seeking a permit?"

Yes No ___

If no, is it permitted? Yes ___ No ___

Has it closed? Yes ___ No ___

Is closure plan approved? Yes ___ No ___

Seeking "clean" closure? Yes ___ No ___

Comments _____

C. Does the corrective action requirement for inclusion into the permit apply?

Yes No ___ Don't Know ___

Comments Groundwater contamination has been detected
in two wells. It may, there were several releases, one a
dike failure in 1982, another is ^{runoff} associated with the old abandoned
landfill.

D. Is there any evidence that clean-up beyond the property boundary may be necessary?

Yes _____ No _____ Don't Know

Comments _____

E. Is the facility subject to the health/exposure assessment requirements?

Yes No _____ Don't Know _____

If yes, is the due date August 8, 1985?

Yes _____ No _____

If no, when? _____

F. Other effects of amendments on facility:

Must close impoundment in 4 years

II. Current Facility Status, as of February 1, 1985

A. Date of last RCRA inspection: *December 14, 1984*

B. Violations found: *NO DOCUMENTED ^{ANNUAL} REVIEW*
of training for personnel

C. Has facility corrected above violations?

Yes No _____ Don't Know _____

Comments _____

- D. If facility has not corrected above violations, as of February 1, 1985, what enforcement action has been taken?

Describe nature of action, and dates.

- E. Is facility subject to g.w. monitoring requirements?

Yes No

If yes:

- a) Date of last g.w. inspection: December 14, 1984
b) Compliance status of g.w. system (see attachment for information requested).

wells installed and located correctly.
Facility has detected groundwater
contamination and is in an
assessment assessment with information
done in July. Needs to do Appendix VIII scan,

- F. Has facility's Part B been called?

Yes No

If yes, describe efforts for obtaining complete Part B.

Part B was received in August of 1983.
The application has had two NOD letters.
The latest submittal is still insufficient as far
as the closure plan. Needs an engineering feasibility
plan for corrective action required by 270.14(c)(7)

If facility has submitted intent to close, describe efforts toward obtaining complete closure plan.

Has not notified any wish to close.

If closing, will post closure permit be required?

Yes No Don't Know

Comments Groundwater contamination will require it.

G. Is facility currently in compliance with the financial requirements for

(a) closure assurance: Yes No

Comments _____

If yes, when does coverage expire? trust fund will be updated

(b) sudden insurance? Yes No

by June, 1985.

Comments _____

If yes, when does coverage expire? no notification of expiration

(c) non-sudden insurance? Yes No N/A

Comments Facility believes that it will be able to cover the non-sudden insurance under the financial test in March.

If yes, when does coverage expire? _____

H. Have any other activities occurred, or currently underway, which could affect the compliance status of this facility between now and November 8, 1985?

Yes _____ No Don't Know _____

Comments _____

III. Based on (I) and (II) above, what are the current and projected problems at the site with respect to being in compliance on November 8, 1985?

- 1) Must have an adequate compliance monitoring program with proposed concentration limits.
- 2) Must do Appendix VIII scan.
- 3) Must submit engineering feasibility plan for corrective action.
- 4) Must submit a complete closure plan.
- 5) Must have coverage for ~~sudden~~ new-sudden insurance.
- 6) May need to address corrective action for previous or current releases.
- 7) Must have health/exposure assessment by August 8.

IV. Based on (I), (II), and (III), what actions (e.g., follow-up inspections, enforcement actions, etc.) should be taken in order to bring the facility into compliance by November 8, 1985? [Be sure to factor in those projected dates set forth in the Implementation Plan, where appropriate.]

- 1) Issue commission order in March requiring a) completion of closure plan by mid April, 1985; b) complete Appendix VIII scan by end of May, 1985; c) ~~new~~ adequate coverage for new-sudden insurance or submit information about attempts to obtain insurance; d) an engineering feasibility plan for corrective action by the end of May, 1985; e) submittal of a compliance monitoring program with proposed concentration limits by July, 1985.
- 2) Address corrective action for previous or current releases by ~~July~~ August, 1985.
- 3) Complete health/exposure assessment by August 8, 1985.

March 29, 1985

FILE COPY

Mr. Dick Karkkainen
Vertac Chemical Corporation
24th Floor, 5100 Poplar
Memphis, Tennessee 38137

Dear Mr. Karkkainen:

Re: Part B Submittal
MSD990714081

As we discussed in recent meeting, the most recent Part B Closure Plan needs additional work to be considered complete. We have attached a list of items which need more details. Also, a Part B Completeness Checklist has been enclosed to insure all items are addressed.

Many of Vertac Chemical's responses to our past requests for additional Part B information has not been in a form which could be placed in the original Part B. Vertac Chemical must either submit a complete Part B following a format similar to the Attached Part B Completeness Checklist or resubmit information so that it will fit into the original Part B. A complete Part B that consists of one document, following a format, must be developed for public review and the draft permit.

The additional information for a complete Part B and a corrective action program or a groundwater compliance program with justified alternate concentration limits must be submitted by May 29, 1985.

Should you have any questions, please contact our office.

Sincerely,

Jack McMillan, Director
Division of Solid Waste Management

JM:CE:hdb

FILE COPY

Vertac Chemical
March 1985
Items Needing Attention

1. Closure Activities - The following items in the Final Closure Activities need to be described in more details.
 - a. To minimize the potential for escape of leachates, as required by the performance standard, the sludges and grossly contaminated soils must be stabilized. Describe the procedures for stabilization including stabilization agent, method and steps to complete stabilization.
 - b. Provide more details about the specific density which will be attained during compaction.
 - c. The final cap must consist of at least two (2) feet of low permeability clay and six (6) inches of soil suitable as a growing medium. This will insure that the permeability of the cover is equal to or less than the subsoil under the management area. Therefore, describe the components of the cover including type and amounts of backfill material, clay, topsoil, etc. Provide calculations for the amounts of the different materials needed. The cap design must be justified by using a hydrologic simulation, such as EPA document SW-868 "Hydrologic Simulation on Solid Waste Disposal Sites", to estimate the infiltration at the cap. Then by using solubility and groundwater information, the leachability and mobility of the stabilized waste can be determined.
2. Decontamination - the Closure Plan must include a description of procedures to decontaminate the equipment used for stabilization and wastewater discharge.
3. Closure Schedule - The closure schedule must be specific in all the activities needed for closure and time to complete each step.
4. Closure Certification - Describe the certification of closure.
5. Closure Cost Estimate -
 - a. Include the cost of disposal other wastewater giving the amount and cost per gallon.
 - b. Detail the costs for the earthwork on all items. The cost must break-out the labor, equipment, backfill material, clay, top soil, transportation, and decontamination costs for each of the steps described in the closure plan.
 - c. Break-out the costs for each individual item for seed, fertilizer, labor and equipment for establishing grass.
6. Post-Closure - Provide more details of the procedures and frequencies for the following maintenance activities:

- a. Facility monitoring equipment (etc. groundwater monitoring system)
 - b. Security devices (etc. fencing)
 - c. Final cover repair and maintenance
 - d. Vegetative cover
 - e. Run-on, run-off control systems
7. Groundwater - Hazardous constituents have been measured in a least one groundwater monitoring well near the waste management area.

Section 270.14(c)(8) states that, if hazardous constituents have been measured in the groundwater exceeding background or drinking water standards, sufficient information, data and analysis must be submitted to establish a corrective action program meeting the requirements of Section 264.100. However, if the facility can demonstrate that alternate concentration limits will protect human health and the environment considering the criteria listed in Section 264.94(b), then a corrective action program is not required. Based on discussions with EPA, we cannot recommend Vertac submitting alternate concentration limits. We believe this would result in much expense in time and effort. A corrective action program appears the best option to obtaining a permit. The information obtained in the groundwater assessment and the results of groundwater analysis should be used in meeting the requirements of Section 264.100 for submittal of a corrective action program.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

MAR 12 1985

4WD-RM

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Dick Karkkainen
Vertac Chemical Corporation
Suite 2414
5100 Poplar Avenue
Memphis, Tennessee 38137

Re: Vertac Chemical Corporation RCRA Part B Application
EPA I.D. Number MSD 990 714 081

Dear Mr. Karkkainen:

On November 8, 1984 President Reagan signed the Hazardous and Solid Waste Amendments of 1984. These amendments to the Resource Conservation and Recovery Act (RCRA) have a number of provisions affecting hazardous waste permitting that are immediately effective for any facilities whose RCRA hazardous waste permit had not been issued as of November 8, 1984. In addition the provisions are applicable in all states whether or not the state has received interim or final authorization under RCRA.

The State of Mississippi has been granted authorization for those portions of the RCRA Hazardous Waste Program that were in effect prior to the passage of the Hazardous and Solid Waste Amendments of 1984. Until Mississippi has made the necessary program revisions and received authorization from EPA for the provisions of the 1984 amendments, EPA will administer the requirements of the 1984 amendments. In order to minimize the impact of these amendments on permit applicants the EPA regional office and the Mississippi Department of Natural Resources will work closely together by requiring only one Part B application (i.e. that addresses both the Part B requirements of the currently authorized state program and the new requirements of the 1984 amendments) that will be jointly reviewed by both agencies.

If the processing of your application is completed prior to the state being authorized for the provisions of the 1984 amendments then it will be necessary for both EPA and Mississippi to issue permits to your facility. The state permit will include those portions of the Hazardous Waste Program that were in effect prior to passage of the 1984 Amendments and the EPA permit will include those new portions of the RCRA program which have been brought about by the 1984 amendments.

Both permits together would then constitute your RCRA hazardous waste permit. If at the time your permit is issued, the state has received authorization for those portions of the RCRA program brought about by the 1984 amendments then only a state permit will be issued and it will be your RCRA permit.

The purpose of this letter is to notify you that your RCRA Part B permit application must be revised to incorporate the requirements of the Hazardous and Solid Waste Amendments of 1984. Your revised Part B application should be submitted on or before October 8, 1985.

This request for a revision to your RCRA Part B permit application and the associated due date of October 8, 1985 for submitting your revisions are related only to the new requirements brought about by the 1984 Amendments. In the meantime the review and processing of the Part B application you have already submitted will continue and you may be required to make corrections and revisions to your original Part B application that will need to be submitted prior to October 8, 1985.

The hazardous waste regulations at 40 CFR §270.10(e)(5) state that:

Failure to furnish a requested Part B application on time, or to furnish in full the information required by the Part B application, is grounds for termination of interim status under Part 124. In addition, the HSWD of 1984 mandates that all land disposal facilities make a complete and final application for a RCRA permit within twelve months from the date of enactment or interim status will terminate.

Failure to submit a revised Part B application by the due date may result in the denial of your RCRA permit. Consequently, you should be sure your revised Part B application adequately addresses all of the requirements of the 1984 Amendments. Please submit two (2) copies to the Mississippi Department of Natural Resources and two (2) copies to the EPA office. The mailing addresses of the two agencies are as follows:

U.S. Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, Georgia 30365
Attention: James H. Scarbrough

and

Division of Solid/Hazardous Waste Management
Mississippi Department of Natural Resources
Post Office Box 10385
Jackson, Mississippi 39209
Attention: Mr. Jack M. McMillan

In accordance with 40 CFR Part 2, you may claim certain information in your Part B application as confidential if such a claim can be substantiated. In order to claim information confidential you should:

1. Determine whether or not the claim of confidentiality can be substantiated; substantiate it (concerning each type of information claimed) by addressing the applicable elements of 40 CFR 2.208, a copy of which is enclosed;
2. Precisely describe which information is claimed as confidential or stamp each page that contains such information with the words "Confidential" or "Confidential Business Information;"
3. Package all pages containing confidential information separately from your total Part B application package. This means that your Part B submittal would consist of two packages: (a) the Part B application without confidential information, and (b) the portion of your Part B application that has been claimed as confidential; and
4. State clearly in your transmittal letter that confidential information is included.

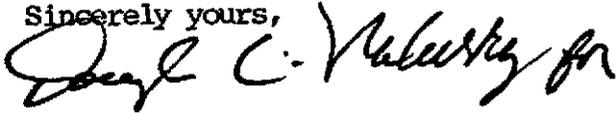
If no claim of confidentiality is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted and substantiated, the information will be treated in accordance with the procedures in 40 CFR Part 2 (Public Information).

Enclosed with this letter is also a summary of the new requirements contained in the 1984 Amendments which affect RCRA permit applications now being processed. All of these requirements may not be applicable to your facility. We have also enclosed some additional information to help explain the new requirements. For two of the new requirements, (1) exposure assessments and (2) the double liner requirement; additional guidance being developed by EPA Headquarters will be provided to you as soon as it becomes available.

Your revised Part B application may be in the form of revised or added pages to be inserted into your original Part B submissions. Revised or new pages should show page number and date (example: 32(12/01/83) would be page 32, revised or added 12/01/83. The revision to your Part B application must include a certification as required by 40 CFR §270.11(d).

Should you have any questions concerning these requirements, please contact Mr. David Lee, Mississippi Division of Solid/Hazardous Waste Management, at 601/961-5171 or alternately, Ms, Beverly A. Spagg, EPA at 404/881-3067 or to discuss the application requirements in more detail.

Sincerely yours,



James H. Scarbrough, P.E., Chief
Residuals Management Branch
Waste Management Division
Region IV



Charles H. Chisolm, Director
Bureau of Pollution Control
Mississippi Department of Natural
Resources

Enclosures

cc: John Hill

February 28, 1985

FILE COPY

Mr. Dick Karkkainen

24th floor, 5100 Poplar
Memphis, Tennessee 38137

Dear Mr. Karkkainen:

Attached is the Bureau's recommended guidance for analysis of Appendix VIII constituents, as required by SWMD 2(D-1)(c). In order for your permit application to be considered complete, you are required to submit the complete scan. We recognize that individual facilities may, of necessity, need to improve or, in some cases, substitute certain site-specific constituents into the list. We intend to evaluate the good-faith efforts taken toward providing a complete Appendix VIII scan. You are reminded that failure to supply a complete application is grounds for denial of the permit and/or termination of interim status.

Prior to conducting sampling and analysis, we would welcome the opportunity of discussing these requirements with you, and to discuss any site-specific or waste specific variances (e.g., exotic compounds) from the Appendix VIII list. If you have any questions, please contact the designated project officer or me at 601-961-5062.

Sincerely,

Jack McMillan, Director
Division of Solid Waste Management

JM:JH:cm
Attachment



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

TELEX 53927

February 21, 1985

RECEIVED
1985 FEB 25 AM 10:05

MISSISSIPPI
DEPARTMENT OF
REVENUE
DIVISION OF SOLID WASTE

Mr. Chuck Estes
Hazardous Waste Section
Mississippi DNR
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209

DIVISION OF SOLID WASTE

REVIEWED BY SM

DATE _____

COMMENTS sent to

EPA # 11-16-87

Dear Mr. Estes:

Pursuant to our discussion on February 19, 1985 I have written this letter to attempt to articulate a question we have with regard to potential future uses of the surface impoundment at our Vicksburg facility.

Present Description and Status of Surface Impoundment:

1. The surface impoundment has existed for a period of approximately 30 years. Modifications were made to the dikes of the impoundment in 1983 to assure compliance with RCRA standards for structural integrity and overtopping during 100 year flood occurrences. The surface impoundment exists alongside an inactive disposal area which was capped in 1983. Additional cap erosion control measures were taken in 1984. A plan view of the surface impoundment, inactive disposal area, and surrounding wells and piezometers is attached. Groundwater data has been collected since 1981.
2. The purpose of the impoundment is to collect rainwater run off from the south plant and serve as a spill collection system in the south plant (spills will flow through the drainage system to the impoundment or will flow to a sump and be pumped to the impoundment). The exception to this flow pattern is the MSMA plant where rainwater and spills are contained within MSMA plant boundaries. No treated or untreated process wastewater is deliberately discharged from the south plant to the impoundment. The impoundment also serves as standby retention basin to receive water diverted from the north plant when that water does not meet pH guidelines for discharge to the Mississippi River. Water in the impoundment is pumped through columns of activated carbon prior to discharge to the Mississippi River.

3. The Bureau of Pollution Control has determined that the impoundment is a hazardous waste management unit.

4. Pursuant to the Bureau of Pollution Control's determination, Vertac has submitted a complete RCRA Part B application and has continually supplemented that application as monitoring data has been collected, as RCRA rules and regulations change and as new questions are asked by the Bureau of Pollution Control. The Part B application contains a closure plan for the surface impoundment.

Present Status of Groundwater Monitoring:

1. An appendix VIII hazardous constituent, dinitro butylphenol, has been found in trace concentration in monitoring well Number 1.

2. Monitoring well number 1 is upgradient of the surface impoundment but downgradient of mounded water underneath the inactive disposal area.

3. The Bureau of Pollution Control has determined that Vertac must analyze the eight RCRA monitoring wells for appendix VIII constituents plus Atrazine. At this time no one in the world is analyzing for appendix VIII constituents to the satisfaction of the EPA. The Bureau of Pollution Control has determined that a New Jersey laboratory, ETC, can make appendix VIII analyses to their satisfaction.

Closure Plan:

1. The closure plan that has been submitted and amplified by Vertac is a simple and conventional plan involving emptying the impoundment by discharging the liquid contents through activated carbon columns and into the Mississippi River, adding dirt to fill the impoundment and then capping the entire impoundment. Any reasonable competent dirt moving firm could execute the plan.

2. Vertac will continue to amplify that simple and complete closure plan as questions are made known. That closure plan will not change for purposes of RCRA Part B permitting, which permitting is necessary because the Bureau of Pollution Control has made a determination that the impoundment is a hazardous waste unit.

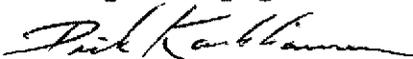
Possibilities for the Future:

1. Vertac does not reasonably anticipate retrofit of a double liner system underneath the surface impoundment as envisioned by November, 1984 RCRA ammendments. We believe the present use of the impoundment coupled with geologic, hydrogeologic, and monitoring information gathered since 1981 indicate to date that the impoundment is probably not a RCRA hazardous waste management unit and additionally does not adversely impact the environment; nevertheless, we have deferred to the judgement of the Bureau of Pollution Control that the impoundment is a hazardous waste unit and are proceeding on that basis.
2. We would at some time in the future, but prior to 1988, ammend our closure plan and replace it with a plan the intent of which is declassification of the impoundment, to the satisfaction of the Bureau of Pollution Control, from RCRA hazardous waste management status.
3. The closure plan would involve those steps which I have described in letters of October 17 and December 20, 1984. Specifically, sediment would be removed, to the satisfaction of the Bureau of Pollution Control, from the impoundment. Present analytical information indicate that the sediment is not a hazardous waste. Sewer drains within the plant would be revised such that no spills of product would flow to the surface impoundment. Each process area would be totally contained as is now the MSMA area. The impoundment would be used solely for retention of rainwater prior to treatment and discharge to the Mississippi River.

Question:

Are the regulatory agencies amenable to the closure plan described in "Possibilities For The Future": or must Vertac abandon this surface impoundment, which present data indicate is relatively impervious and has structural integrity, and close it by filling it in with dirt and capping it prior to 1988?

Very truly yours,

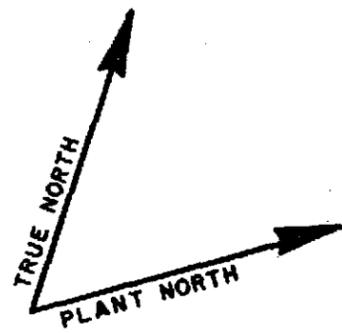


Dick Karkkainen
Director of Environment and Safety

RDK/bh

cc: J. McMillan
J. Herrmann
J. Hill

DRAWN BY DIS CHECKED BY APPROVED BY
10/18/84 NUMBER 846545-B



VERTAC CHEMICAL CORP VICKSBURG PLANT

NORTH PLANT

MW-4

HIGHWAY 61

PLANT ENTRANCE ROAD

RIFLE RANGE ROAD

LEGEND

- ⊕ PZ PIEZOMETER
- ⊕ MW MONITOR WELL

STOUTS BAYOU

INTERIM STATUS SURFACE IMPOUNDMENT

INACTIVE DISPOSAL AREA

HENNESSEY'S BAYOU

HATCHER BAYOU

MW-2

MW-7

MW-8

MW-6

MW-3

MW-5

PZ1

PZ2

PZ1-B

PZ4

MW-1



PLAN VIEW

MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209
(601) 961-5171



MEMORANDUM

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

TO: Hazardous Waste Treatment, Storage and Disposal Facilities
FROM: Jack M. McMillan
DATE: February 7, 1985
SUBJECT: Effect of Hazardous and Solid Waste Amendments of 1984

The Hazardous and Solid Waste Amendments of 1984 (HSWA) were signed into law by President Reagan on November 8, 1984. These amendments will have several effects on the hazardous waste regulatory program, both immediate and long-term.

One of the earliest items to be addressed is a requirement that RCRA permits require corrective action to clean up contamination caused by prior releases of hazardous wastes or constituents from solid waste management units, regardless of when the waste was placed in the unit. This requirement applies to both hazardous and nonhazardous waste management units.

To help establish how this provision may apply to your facility, we ask that you complete the enclosed form and return it to our office within 15 days of your receipt of this letter. Also enclosed is a summary containing details of this and other provisions of the HWSA for your information. Please contact David Lee or John Herrmann of my staff, if you have any questions on this matter.

JMM:DEL:vgr
Enclosures
cc: Mr. James H. Scarbrough



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

TELEX 53927

December 20, 1984

Mr. Chuck Estes
Hazardous Waste Section
Mississippi DNR
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209

Dear Mr. Estes:

As we have discussed we need to have a meeting to review:

1. declassification of the Vicksburg surface impoundment,
2. program to be followed if the pond is declassified,
3. program to be followed if the pond is not declassified.

I believe that declassification is easy to accomplish. All we have to do is revise process sewer drains and provide adequate concrete spill containment around our DNBP process, formulating and packaging areas such that DNBP spills and water used to clean up the spills will be contained locally and not drain to the surface impoundment. There is no reason to believe that the sediments within the pond are RCRA hazardous. Nor for that matter is there direct evidence that there were spills of DNBP into the pond via the drainage system, the impoundment was declared RCRA hazardous because of the potential. The impoundment does of course contain DNBP from process wastes but that is not RCRA hazardous.

The reasons for declassification involve the new RCRA amendments. The retrofitting requirement for a double-liner with an internal leachate collection system is not cost effective for an impoundment, the main function of which is spill and rainwater control. Additionally the EPA has caused such confusion with the insurance industry that it is likely that environmentally related insurance will not longer continue to exist. Fortunately for Vertac we will be able to pass the RCRA financial tests and will be able to make appropriate certifications. To this end if we could obtain forms with

RECEIVED
1984 DEC 27 11 39 55
MISSISSIPPI DNR
BUREAU OF POLLUTION CONTROL

appropriate Mississippi language now it will help avoid future confusion. We will additionally continue to attempt to retain environmentally related insurance but for reasons completely unrelated to RCRA.

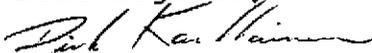
If the impoundment is declassified I believe we need to:

1. Complete the description of existing hydrogeologic conditions. In fact I hope we will have a report from IT Corporation available for our meeting.
2. Forget the appendix VIII nonsense.
3. Install a pump in well number 1 and pump it to the surface impoundment.
4. Forget the closure plan, etcetera.

If the impoundment is not declassified or we need time and a program prior to declassification I believe we need to:

1. Complete the description of existing hydrogeologic conditions.
2. Execute HAP analyses of monitoring wells when laboratories are able to assimilate the methodology.
3. Review the closure plan.

Best regards,



Dick Karkkainen
Director of Environment and Safety

RDK/bh

cc: J. Hill

November 26, 1984

Mr. Dick Karkkainen
Vertac Chemical Corporation
24th Floor, 5100 Poplar
Memphis, Tennessee 38137

SOLID WASTE READING FILE

Dear Mr. Karkkainen:

Re: Groundwater Assessment For Part B
Submittal MSD990714081

We have received the groundwater assessment information. Results from the assessment must be reported to our office by March 4, 1985. We will forward our requirements for an Appendix VIII scan as soon as our policy has been set.

Should you have any questions, please contact our office.

Sincerely,

Charles Estes, P. E.
Division of Solid Waste Management

CE:cm



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

RECEIVED TELEEX 53927

November 14, 1984

NOV 15 1984
MISSISSIPPI DNR
BUREAU OF POLLUTION CONTROL

Mr. Chuck Estes
Hazardous Waste Section
Mississippi DNR
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209

Dear Mr. Estes:

Attached is a copy of the Vicksburg Groundwater Assessment received today from Alan Gradet and a copy of my letter on Appendix VIII Constituents.

It is our plan to install the piezometers and stream gauges located in Figure "E" during the week of November 26, 1984. We would additionally initiate the level measurements during the same week and take samples for analysis. Analytical parameters would be those specified in my November 1, 1984 letter plus pH, conductance, TOC, TOH, TDS, chlorides, sodium, sulfate, potassium and nitrate.

This is a few days behind the schedule you required in your letter of October 3, 1984.

Best regards,

Dick Karkkainen
Director of Environment and Safety

RDK/bh

cc: A. Gradet
J. Hill



ITT CORPORATION

November 12, 1984

REC'D
11/13/84
D.L.K.

Mr. R. D. Karkkainen
Director-Environment & Safety
Vertac Chemical Corporation
5100 Poplar, 24th Floor
Memphis, TN 38137

Project No. 846545

VICKSBURG GROUNDWATER ASSESSMENT

Dear Dick:

In accordance with your letter of October 5, 1984, we have completed several of the required work tasks as outlined in the Groundwater Assessment Plan. More specifically we have completed the following items:

1. Stratigraphic Cross-Sections (Figures B,C, and D). We have prepared three cross-sections using the existing boring data. The soil boring logs prepared by both previous contractors were used for this task. It should be noted that the change from silty clay to clayey silt is subtle and more detailed information from the new piezometers will better define this interface. The stratigraphic sections attached to this letter also show the well screening interval and the water levels recorded on March 4, 1983. Please note that wells #1-#4 were installed by one contractor while wells #5-#8 were installed by another contractor.
2. Existing Hydrogeologic Data. The compilation of water level measurements (made on March 4, 1983) is included on the attached stratigraphic logs. These data and their presentation also suggest that MW-1 is an upgradient well relative to the impoundment and the inactive disposal area. You might note that there is a significant distance between MW-1 and MW-5 (section B-B). If there is a gradient change in the vicinity of the Interim Status Impoundment, the additional piezometers proposed for that area should detect an elevated in water level.

We have also reviewed the data contained in the contractors' reports concerning soil permeability. We feel that their calculations are appropriate given the

Regional Office

ITT Corporation • 2925 Briarpark • Suite 400 • Houston, Texas 77042 • 713-784-5070



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 661-767-6851

1984 NOV 8 AM 9:25
November 8, 1984

REPLY TO: P. O. BOX 3
VICKSBURG, MS 39180
(601) 636-1231

MISSISSIPPI DEPARTMENT
OF NATURAL RESOURCES
BUREAU OF POLLUTION
CONTROL

Mr. Chuck Estes
Mississippi Department of Natural Resources
Bureau of Pollution Control
Hazardous Waste Division
P.O. Box 10385
Jackson, MS 39209

Dear Mr. Estes:

Vertac intends to begin a short (= 60-day) campaign manufacturing 2 ethylhexyl nitrate (EHN), beginning the first of December, 1984.

The manufacturing process will generate two separate liquid waste streams both of which are considered hazardous by the characteristic of corrosivity. This 800 tons of corrosive waste represents less than 5% of the corrosive liquids currently listed in our Part B Application and therefore an actual permit amendment or modification is not proposed.

If you have any questions concerning this matter, please feel free to give me a call.

Sincerely,

John G. Hill
Environmental Engineer

JGH/ld
cc - F. Ahlers
R. Karkkainen



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

TELEX 53927

October 17, 1984

RECEIVED
1984 OCT 19 AM 9:40
U.S. DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
BUREAU OF POLLUTION CONTROL

Mr. Chuck Estes
Hazardous Waste Section
Mississippi DNR
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209

Dear Mr. Estes:

This note is written to bring up ideas for discussion and does not imply or obligate a particular direction of activity and does not request a Bureau of Pollution Control decision but does request guidance.

It may at some time be advantageous to remove our surface impoundment from RCRA status. In order to do this I think we would have to:

1. Revise process sewer drains around our DNBP process, formulating and packaging areas such that DNBP spills and water used to clean up the spills will be contained locally and not drain to the surface impoundment, thereby, eliminating Subpart D paragraph 261.33(e) hazardous waste P020. The surface impoundment would continue to contain DNBP but the DNBP would be from regulatorily non-hazardous sources:

a. Paragraph 261.33(d) "...Comment... It does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in paragraphs (e) or (f). Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in paragraphs (e) or (f), such waste will be listed in either paragraphs 261.31 or 261.32 or will be identified as a hazardous waste by the characteristics set forth in Subpart C of this Part."

b. Paragraph 261.3 (a)(iv) "...the following mixtures of solid wastes and hazardous wastes listed in Subpart D are not hazardous wastes ... if the generator can demonstrate that the mixture consists of wastewater the discharge of

October 17, 1984
Page 2

which is subject to ... Section 402 ... of the Clean Water Act ... and ... (D) a discarded commercial chemical product, or chemical intermediate listed in paragraph 261.33, arising from de minimis losses..."

2. Remove some of the sludge, soil or sediment from the sides and bottom of the surface impoundment such that the remaining soil is sufficiently free of toxaphene that the soil will not be characterized as Subpart C paragraph 261.24 EP Toxic Hazardous Waste D015. The sediment was sampled by the Bureau of Pollution Control during the breach of the impoundment levee in February, 1983. Subsequent analysis (attached) detected 280 and 360 ppm toxaphene in the sample; however, the EP Extract did not contain greater than or equal to 0.5 ppm toxaphene.

If we did the above could we remove the surface impoundment from RCRA status?

Best regards,



Dick Karkkainen
Director of Environment and Safety

RDK/bh

cc: A. Gradet
J. Hill

October 5, 1984

FILE COPY

Mr. Dick Karkkainen
Vertac Chemical Corporation
24th Floor, 5100 Poplar
Memphis, Tennessee 38127

Dear Mr. Karkkainen:

Re: Groundwater Assessment Plan
for Vicksburg Facility MSD

We have reviewed the proposed groundwater assessment plan and consulted a hydrologist at EPA Region IV.

We concur with the general direction of the assessment program. The water level monitoring program must also include Stout's Bayou as well as Hennessey's Bayou. The hydrologic study must identify the impact of the groundwater at the site on the streams. Also the study must identify and describe the groundwater which may be passing under the streams and moving off-site. Therefore, monitoring Well #5 should be used for water level measurements. Consideration should be given to the installation of piezometers on the south side of Hennessey's Bayou to identify groundwater which may pass under the stream. Additional water level piezometers appear necessary around the impoundment to give a better understanding of the impact of the impoundment on the groundwater system.

These piezometers should be installed as soon as possible. Waiting for results from monitoring well levels before installation does not appear to be necessary.

Under B.3 of the assessment plan it is stated that Appendix VIII hazardous constituents which have not been detected in the groundwater will not be analyzed for. The only constituents which may be eliminated from analysis are those which are not raw materials, products or known degradation by-products, have no acceptable analytical procedures or do not exist in water. Past analysis of groundwater cannot be used to drop a constituent from consideration.

In addition to analyzing for hazardous constituents in Wells #4, #1, #5, and #6, monitoring Well #8 should be sampled and analyzed. Quarterly sampling under the assessment mode is not necessary. The time to conduct the first sampling should be reduced to 30 days with subsequent samplings 60 days apart instead of 90 days. Since subsequent samplings will be conducted to verify the initial sampling, only one or two samples after the initial sampling should be required.



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

September 27, 1984

1984 OCT - 2 REPLY TO: P. O. BOX 3
VICKSBURG, MS 39180
(601) 636-1231
RECEIVED
MISSISSIPPI COMMISSION
OF NATURAL RESOURCES
BUREAU OF POLLUTION
CONTROL

Mr. Charles Estes, P.E.
Hazardous Waste Section
Mississippi Department of
Natural Resources
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209

Dear Mr. Estes:

Re: Mississippi Commission of
Natural Resources -
Order No. 71784

Attached are three copies of the information requested in the above-mentioned order. Please note that we have modified the closure plan to incorporate in-situ containment of all potentially hazardous materials in the subject impoundment. Item numbers correspond to the list of requirements as outlined in the Bureau's letter of June 11, 1984.

I believe we have responded to all items of concern. Dick Karkkainen and I would be happy to meet with you to discuss any further questions or review this submittal.

Sincerely,

John G. Hill
Environmental Engineer

JGH/ld
Enc.

cc: - F. Ahlers
R. Karkkainen

FILE COPY

September 13, 1984

Mr. Dick Karkkainen
Vertac Chemical Corp.
24th Floor, 5100 Poplar
Memphis, Tennessee 38137

Dear Mr. Karkkainen:

Re: Commission Order
For Resubmittal of Part B
MSD990714081

Your letter of August 14, 1984, requested a 30 day extension of time to resubmit the Part B application for the Vicksburg facility.

This letter is to confirm our telephone conversation that the Bureau will grant the requested 30 day extension. The submittal of the revised Part B is now September 30, 1984.

Should you have any further questions, please contact our office.

Sincerely,

Charles Estes, P.E.
Division of Solid Waste Management

CE:ps



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

TELEX 53927

August 14, 1984

Mr. Charles Estes
Hazardous Waste Section
Mississippi DNR
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209

RECEIVED
1984 AUG 16 10 41 AM '84

RE: Commission Order No. 717-84

Dear Mr. Estes:

In confirmation of our discussion this day pursuant to "activity 2" of the referenced order in which the Commission has required the submission, on or before August 30, 1984, of revisions to our Part B application consistent with comments of the Bureau of Pollution Control we request and will be granted a 30 day extension of time.

The reason we need the extension of time is that we have hired within the last two weeks an environmental engineer for Vicksburg, Mr. John Hill. Mr. Hill will be responsible for the "activity 2" submission. Without the extension of time he would have only one week to become familiar with and provide the minute detail required by the Bureau.

For the record it should be noted that there are 17 comments submitted to us by the Bureau of Pollution Control. Comment 17 has been addressed by our "activity 1" submittal of August 6, 1984. Comments 1 through 5 have been addressed by Mr. Maraman and can be sent as a partial submittal, if desired. Comments 6 through 16 all address the surface impoundment closure plan.

The closure plan is being revised and drawings prepared. As presented in the original Part B submittal the closure was presented as a cost effective plan consisting of consolidating sediments in the 3 sectioned surface impoundment into one section. Unfortunately that opened up the question of "how clean is clean" when moving sediment. With no guidelines on "how clean is clean" it is probable that the analytical, exploratory and unknown aspects of the original plan

Page 2
August 14, 1984

no longer make it cost effective. Hence, the new closure plan and cost estimate will entail the conventional approach of stabilizing the sediments, filling in the entire pond with dirt, capping with clay, and adding topsoil and vegetation.

I appreciate your understanding and cooperation.

Best regards,



Dick Karkkainen
Director of Environment and Safety

RDK/bh

cc: F. L. Ahlers
R. A. Guidi
J. Hill
G. D. Madsen
R. F. Maraman

June 11, 1974

Mr. Dick Markkainen
Vortec Chemical Corporation
24th Floor, 5100 Poplar
Memphis, Tennessee 38107

Dear Mr. Markkainen:

Re: Test 3 Application Review
Case #00000714001

After reviewing your facility's resubmitted Test 3 application, specific items listed on the attached pages were found to need clarification or additions. The application should be submitted with appropriate page numbers.

Please organize the new material so that it may be inserted into the original application or send us an entirely revised application. All corrections and/or additions to the application must be submitted to this office no later than August 14, 1974. Please contact us should you have any questions on any of these items.

Sincerely,

Charles Estes, E. C.
Hazardous Waste Section

CE:hb

Attachments

cc: Ms. Laverly Spang, Environmental Protection Agency, Region IV

VINCELO CHEMICAL
June 1984
Items Requiring Attention

1. The types of problems to look for during the inspection of the emergency equipment must be listed. This may be done by adding another column on the emergency equipment inspection page. Examples of problems to look for with the equipment could be missing items, inoperative equipment or empty equipment.
2. Under "Storage and Treatment of Released Material," a statement must be added that after an emergency the facility will notify our office that all emergency equipment listed in the contingency plan is checked and fit for its intended use before operations are resumed.
3. Under 2-3 (Coordination agreements) copies of the contingency plan must be sent to local police and fire departments, hospitals, contractors, and local emergency response teams. A statement that this has been done must be included.
4. The personnel incident section must include the requisite skill, education, or other qualifications for each position.
5. Include procedures for using, inspecting, repairing and maintaining emergency and monitoring equipment in the training section for the effluent operators.
6. 2-1a - Closure Performance Standard - A more detailed survey of the closure activities and what the facility plans to accomplish through closure is needed. An example is enclosed which may be modified to fit the facility.
7. 2-1b - The following items in the "Final Closure Activities" need to be described in more detail:
 - a. Describe how the liquids in the impoundment will be disposed of.
 - b. How deep will Sections 1 and 2 be dredged?
 - c. What levels of contamination will be the basis for depth of dredging?
 - d. Will samples be taken to determine the level of contamination? How many and where?
 - e. Provide calculations to substantiate the 6,000 cubic yards of hazardous waste.
 - f. Provide calculations to substantiate the amount of material in the finger dike between Sections 1 and 2.
 - g. How will the dredge material from Sections 1 and 2 be transported and deposited in Section 3?

- h. How will the top five feet of the dikes around Sections 1 and 2 be removed and transported and deposited in Section 3?
 - i. How will protection of the cover material be provided?
 - j. The permeability of the cover material must be equal to or less than the material under the management area. Provide data to substantiate this.
 - k. Give an estimate of the amount and type of fertilizer and grass seed to be used. Will the area be enclosed to prevent erosion?
 - l. The fill cover must be of uncontaminated soil. Since the dikes will have been in contact with the wastewater and sediments, clean borrow material must be used for the cap.
 - m. A closure checklist is enclosed for you to complete and compare to the closure plan.
9. The proposed closure plan will result in lowering the dike height allowing possible flooding of parts of the site and potential erosion from the creek. Since some level of contaminants will probably remain in Sections 1 and 2, how will erosion and stability of the closed area be insured?
 1. A more detailed engineering drawing of the final plan view and final cross-section (with a cross-section in the north-south direction) in Sketch # (5) 2-1 must be made. The engineering drawing must be to scale with one foot contours. The drawing must be expanded to indicate how the waste management area will fit into the surrounding area, i.e. the creek, inactive landfill, and railroad.
 10. 1-2 - Post Closure Activities - A more detailed description of activities to be performed is needed.
 - a. How often will the area be inspected? By whom?
 - b. What will the inspections look for?
 - c. How often will the area be mowed?
 - d. What equipment will be used for erosion control?
 - e. Where will fill material for erosion come from?
 - f. A post-closure checklist is enclosed for you to complete and compare to the post-closure plan.
 11. The regulations require monitoring of compliance wells twice a year during the 30-year post-closure period. A statement must be added that Vertac will sample the wells as required by the regulations.
 12. I-14 - Decontamination - The closure plan indicates that a dragline and bulldozer will be used to move hazardous wastes also trucks may be used. These as well as other facility equipment such as the pumps to the carbon unit must be decontaminated at closure and procedures to do so described.

12. 1-11 - Closure Schedule - The closure schedule is inadequate. It must be replaced with a schedule indicating the total time to complete closure, the time to complete specific closure activities and an inspection schedule to be used during closure.

13. 1-12 - Notice in Part V to keep my collection to local food authority - A statement must be included indicating how the facility will meet the requirements stated in Sections 271.115 and 271.120 with respect to the department identified in the Part V.

14. 1-13 - Closure and Post-Closure Cost Estimation -

- a. Estimate the cost of disposal of the wastewater giving the amount and cost per gallon.
- b. Estimate the costs for the removal of all items. The cost must break-out the labor, equipment, material movement (dump trucks) and decontamination costs for each of the areas described in the closure plan.
- c. Provide the calculations to substantiate the 20,000,000 year figure in Item 4 of the closure costs.
- d. Estimate the costs of soil, fertilizer, labor and equipment in planting areas under Item 4 of the closure costs.
- e. Estimate the cost of sampling and analyzing the soil in Sections 1 and 2 to determine contamination levels. This should include field sampling and laboratory costs.
- f. Under post-closure costs in Item 1, describe in more detail the 20 hours per year figure. Does this include erosion control, grass seeding, monitoring well sampling, etc?
- g. Section 271.03(d) requires that each monitoring well at the compliance point be sampled at least semi-annually during the post-closure grace period. The permit may be amended during post closure to modify this requirement. Therefore, the number of analyses given in Item 2 of the post closure costs must be amended.

15. 1-14 - Closure/Post-Closure Grant Fund - A permit condition will require the my in schedule to be amended to 10 years at the time of permit issuance.

16. Groundwater Monitoring -

- a. The Waste Chemical Corporation letter of March 2, 1986, indicated levels of atrazine in monitoring wells 1, 2, 5, 6, and 8. Samples taken by the Bureau of Pollution Control on November 3, 1987 found concentrations of atrazine in wells 6 and 8 and a significant concentration of DDT in well 1. The Bureau of Pollution Control's data is enclosed. Section 271.11(c)(4) requires that a description of any place of contamination be delineated. The information submitted in the Part V does not delineate a plume or provide sufficient information to do so. The Part V must be amended to include the delineation of the place of contamination.

4. Since hazardous constituents have been detected in the groundwater, a groundwater quality assessment plan must be implemented following Sections 21.07(3)(c) and (d).

April 20, 1984

Mr. Dick Karkkainen
Vertac Chemical Corporation
24th Floor
5100 Poplar
Memphis, Tennessee 38137

FILE COPY

Dear Mr. Karkkainen:

Re: MSD990714081

On April 10, 1984, I visited the Vicksburg facility. The purpose of the visit was to ensure that interim status regulations were being complied with and to discuss additional corrections needed for the Part B application.

The impoundment dikes appeared in good condition with some grass emerging. A freeboard in excess of two feet was observed. The freeboard gauge should be modified to reflect the current dike elevations. The side slopes of the inactive landfill had been eroded from recent heavy rains. These must be filled and grass established on the entire area.

A review of the manifests for the HSHA salts found that the copy signed by the disposer was not in the file for shipments covering the first three to four months. If the copies can not be found at the facility, copies must be obtained from the disposer and placed in the file. The annual report for the Vicksburg facility was due March 1, 1984. Additional copies are enclosed for you to complete.

The inspections log for the impoundment and personnel training reviews were found to be current. Other items including the closure plan, contingency plan, financial and insurance requirements, and ground water monitoring program will be addressed in a future letter detailing additional revisions needed in the Part B application which we discussed.

The previously mentioned items must be corrected and a letter detailing the activities taken to correct them must be received by our office by May 24, 1984. Should you have any questions, please contact us.

Sincerely,

Charles Estes, P. E.
Division of Solid Waste Management

CR:sm

Enclosures

cc: Mr. Steve Kessler, EPC

Mr. Don Thomas, Vertac Chemical Corporation, Vicksburg, Mississippi



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

TELEX 53927

August 14, 1984

Mr. Charles Estes
Hazardous Waste Section
Mississippi DNR
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209

RECEIVED
1984 AUG 16 11 09 AM
MISSISSIPPI DNR

RE: Commission Order No. 717-84

Dear Mr. Estes:

In confirmation of our discussion this day pursuant to "activity 2" of the referenced order in which the Commission has required the submission, on or before August 30, 1984, of revisions to our Part B application consistent with comments of the Bureau of Pollution Control we request and will be granted a 30 day extension of time.

The reason we need the extension of time is that we have hired within the last two weeks an environmental engineer for Vicksburg, Mr. John Hill. Mr. Hill will be responsible for the "activity 2" submission. Without the extension of time he would have only one week to become familiar with and provide the minute detail required by the Bureau.

For the record it should be noted that there are 17 comments submitted to us by the Bureau of Pollution Control. Comment 17 has been addressed by our "activity 1" submittal of August 6, 1984. Comments 1 through 5 have been addressed by Mr. Maraman and can be sent as a partial submittal, if desired. Comments 6 through 16 all address the surface impoundment closure plan.

The closure plan is being revised and drawings prepared. As presented in the original Part B submittal the closure was presented as a cost effective plan consisting of consolidating sediments in the 3 sectioned surface impoundment into one section. Unfortunately that opened up the question of "how clean is clean" when moving sediment. With no guidelines on "how clean is clean" it is probable that the analytical, exploratory and unknown aspects of the original plan

Page 2
August 14, 1984

no longer make it cost effective. Hence, the new closure plan and cost estimate will entail the conventional approach of stabilizing the sediments, filling in the entire pond with dirt, capping with clay, and adding topsoil and vegetation.

I appreciate your understanding and cooperation.

Best regards,



Dick Karkkainen
Director of Environment and Safety

RDK/bh

cc: F. L. Ahlers
R. A. Guidi
J. Hill
G. D. Madsen
R. F. Maraman



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30385

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

4AW-RM

Mr. R.A. Guidi
Vice President
Vertac Chemical Corporation
Suite 2414 Poplar Avenue
Memphis, Tennessee 38137

Re: Vertac Chemical Corporation
P.O. Box 3
Vicksburg, Mississippi 39180
EPA I.D. No. MSD990714081

Dear Mr. Guidi:

This letter constitutes a formal request for Part B of your application for a hazardous waste facility permit under the Resource Conservation and Recovery Act (RCRA) and the Mississippi Solid Waste Disposal Act for your above referenced facility. This joint request by the Environmental Protection Agency (EPA) and the State of Mississippi, Bureau of Pollution Control, is made under the authority of 40 CFR §122.22(a) and Mississippi Hazardous Waste Regulations Rule No. 122.22(a). Failure to furnish a requested Part B application on time, or to furnish in full the information required in the Part B application, is grounds for termination of interim status under 40 CFR §122.22(a)(5).

The State of Mississippi has been granted Phase II (A and B) Interim Authorization which covers permitting authority for hazardous waste storage facilities (tanks and containers) and hazardous waste incinerators. Mississippi has submitted a final application for Phase II C Interim Authorization (permitting authority for hazardous waste landfills, waste piles, surface impoundments and land farms). Until such time as Mississippi's Phase II C Interim Authorization application is approved, EPA retains full and ultimate responsibility for issuing permits to hazardous waste land disposal facilities in the State. However, because Mississippi's Phase II C Interim Authorization application is under review, the State and EPA will review your permit application concurrently. If Mississippi receives Phase II C Interim Authorization prior to issuance of your permit, EPA will not take official action on your permit application but will defer the permit issuance/denial decision to the State.

Enclosed is a copy of the regulations which set forth the information required in the Part B application for your facility. The completed Part B application must be submitted to EPA no later than six (6) months from the date of this request. Please send three (3) copies of the Part B application to Mississippi and four (4) copies to EPA. The mailing addresses for the two agencies are as follows:

Environmental Protection Agency
345 Courtland Street
Atlanta, Georgia 30365
Attention: James H. Scarbrough

Division of Solid/Hazardous Waste Management
Mississippi Department of Natural Resources
P.O. Box 10385
Jackson, Mississippi 39209
Attention: David Lee

In accordance with 40 CFR Part 2, you may claim certain information in your Part B application as confidential if such claim can be substantiated. In order to claim information confidential you should:

1. Determine whether or not the claim of confidentiality can be substantiated; substantiate it (concerning each type of information claimed) by addressing the applicable elements of 40 CFR §2.208, a copy of which is enclosed;
2. Precisely describe which information is claimed as confidential or stamp each page that contains such information with the words "Confidential" or "Confidential Business Information;"
3. Package all pages containing confidential information separately from your total Part B application package. This means that your Part B submittal would consist of two packages: (a) the Part B application without confidential information, and (b) the portion of your Part B application that has been claimed as confidential; and
4. State clearly in your transmittal letter that confidential information is included.

If no claim of confidentiality is made at the time of submission, EPA may make the information available to the public without further notice.
If a claim is asserted and substantiated, the information will be treated in accordance with the procedures in 40 CFR Part 2 (Public Information).

In the near future, EPA will be holding a training course on "How to Prepare a Part B Permit Application for a Hazardous Wastes Land Disposal Facility." We will notify you of the time and date of this training seminar. A guidance manual on preparing Part B applications is also available. If you will contact our office, we will be glad to send you one.

If you plan to withdraw your Part A application and terminate your interim status, or modify your Part A application in such a way that the land disposal regulations do not apply to your facility, your request for withdrawal or modification should be submitted to EPA within 30 days of the date of this letter.

Should you have any questions concerning these requirements, please contact Mr. David Lee, Mississippi Division of Solid/Hazardous Waste Management, at (601) 961-5171 or Mr. Doug McCurry of EPA at (404) 881-3433.

Sincerely yours,

John A. Little, Deputy

for

Charles R. Jeter
Regional Administrator

Charles H. Chisolm

Charles H. Chisolm, Director
Bureau of Pollution Control
Mississippi Department of Natural
Resources

Enclosure

cc: Mr. Jack M. McMillan, Director
Division of Solid/Hazardous Waste Management
Mississippi Department of Natural Resources
P.O. Box 10385
Jackson, Mississippi 39209

Mr. Fred Ahlers
Plant Manager
Vertac Chemical Corporation
P. O. Box 3
Vicksburg, Mississippi 39186



VERTAC CHEMICAL CORPORATION

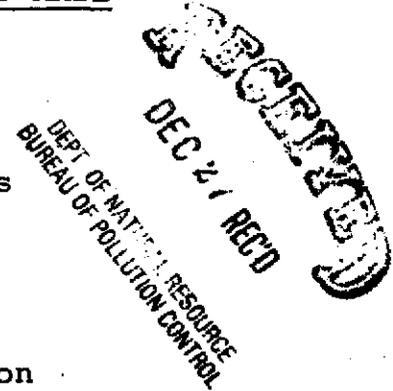
24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

TELEX 53927

December 22, 1983

CERTIFIED MAIL

Mr. Charles Estes, P.E.
Hazardous Waste Section
Mississippi Department of Natural Resources
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209



RE: RCRA Part B for MSD990714081
Additional and/or Clarified Information

Dear Mr. Estes:

Attached are three copies of the information required by your review of our application as specified in your letter of November 1, 1983.

We believe we have been responsive to all the items, nevertheless, many items are open to interpretation. After you and others at the Bureau of Pollution Control have had an opportunity to review this, Bob Maraman and I would be glad to meet with you and review any detail

Best regards,

Dick Karkkainen
Director of Environment and Safety

RDK/bh

cc: R. J. Maraman

November 1, 1983

FILE COPY

Mr. Dick Karkkainen
Vertac Chemical Corporation
24th Floor, 5100 Poplar
Memphis, Tennessee 38137

Dear Mr. Karkkainen:

Re: Part B Application Review
for NSD990714081

After reviewing your facility's Part B application, specific items listed on the attached pages were found to need clarification or additions. The application should be submitted with appropriate page numbers.

Please organize the new material so that it may be inserted into the original application or send us an entirely revised application. All corrections and/or additions to the application must be submitted to this office no later than December 23, 1983. Please contact us should you have any questions on any of these items.

Sincerely,

Charles Estes, P. E.
Hazardous Waste Section

CE:hdb

Attachments

cc: Ms. Beverly Spagg, Environmental Protection Agency, Region IV

VERTAC CHEMICAL CORPORATION - PART B REVIEW

October, 1983

List of Items Needing Attention

1. B-1 - Vertac General Description - Exclude all reference to the MSMA process since it will not be permitted.
2. B-2 - Topographic Map - Include a more detailed topographic map indicating the 100-year floodplain to demonstrate whether the 16,000-gallon tanks are in the floodplain.
3. D-2 - Tanks - We cannot accept a calculation of residence time as evidence that wastes are not stored over 90 days in the 16,000-gallon tanks. If the tanks can be drained until a steady, continuous flow ceases, the tanks can be regulated under the generator standards. If this is the case, this issue should be handled separately from the Part B. All information for these tanks should be excluded from the Part B and addressed in a separate document. Should the tanks not be able to meet the guidance for an empty tank, the tank checklist (attached) must be addressed. Corrosion of the 16,000-gallon tanks is the chief concern. More information on tank V-3 is needed to determine if it should be included in the permit. Is the DNEP process wastewater going to tank V-3 always neutralized? Describe the neutralization process in detail. Should wastewater from the DNEP process not always be neutralized before going to tank V-3, the tank checklist (attached) must be addressed for the tank. Otherwise, all information about tank V-3 should be excluded from the Part B application and discussed in a separate document.
4. F-1a - Security - Describe the fence height, material, and construction in more detail. Describe the procedures to gain access to the plant and the number of guards and their responsibilities. Warning signs must be legible from a distance of at least 25 feet.
5. F-2 - Inspections - The inspection sheet must be revised to show more detail. Examples of inspection logs and checklists for tanks and surface impoundments are included with Attachment I. These may be modified for Vertac's facility. Give a schedule for mowing the grass on the levees surrounding the impoundment.
6. F-3a(1) - Internal Communications - A disaster horn is identified on the emergency equipment map but no particular signal is described which is capable of providing immediate emergency instruction to personnel.
7. F-3a(2) - External Communications - Describe the location or availability of a telephone or handheld two-way radio for summarizing emergency assistance from local police departments, or State or local emergency response teams.

17. G-4h - Post-Emergency Equipment Maintenance - Describe the procedures for ensuring that all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.
18. G-5 - Emergency Equipment - Give descriptions and capabilities of emergency equipment including spill control equipment, fire control equipment, personnel protection items, first aid and medical supplies, and emergency decontamination equipment. See Attachment I.
19. G-6 - Coordination Agreements - Describe any coordination agreements with local police and fire departments, hospitals, contractors, and State and local emergency response teams in case of emergency.
20. G-7 - Evacuation Plan - Include a plan that addresses the criteria for evacuation, a description of signal(s) to be used to begin evacuation and a description of evacuation routes.
21. H-1a - Job Titles and Duties - List the names of the effluent operators.
22. H-1b - Training Frequency and Techniques - For each employee involved in hazardous waste management, describe the frequency of training and techniques used in training.
23. H-1c - Training for Emergency Response - Document that the training program trains facility personnel to respond effectively to emergencies and trains them to be familiar with emergency procedures, emergency equipment, and emergency systems.
24. H-2 - Implementation of Training Program - Indicate that training has been and will be successfully completed by personnel within six months of their employment. Also, a system must be developed to document that personnel receive an annual review by classroom or on-the-job training.
25. I-1a - Closure Performance Standard - Describe how closure will minimize the need for post-closure maintenance and will minimize or eliminate releases of hazardous wastes, hazardous waste constituents, leachate, and contaminated rainfall to the air, groundwater, surface water, and surrounding land.
26. I-1b - Final Closure Activities - A more detailed description of the closure activities is needed. Give a more detailed drawing and description of the impoundment closure (i.e., final elevation of the cap, detailed cross section drawings, and run-on control). Closure activities given apply only to the surface impoundment. If tanks are also to be permitted, these must be addressed in the closure plan.

8. F-3a(3) - Emergency Equipment - Spill control equipment must be identified. See Attachment I.
9. F-4a - Loading Operations - Describe the spill control measures available at the tank truck loading area for the two 16,000-gallon tanks.
10. G-1 - General Information - The facility name and location, operator, site plan and description of facility operations must be included for the benefit of local police and fire departments, hospitals, contractors, and State and local emergency response teams.
11. G-2 - Emergency Coordinators - The addresses and office and home telephone numbers of the coordinators must be given. Also, a statement authorizing designated coordinators to commit the necessary resources to implement the contingency plan must be included.
12. G-4a - Notification - The contingency plan must make it clear that the order of notification is the emergency coordinator, plant personnel, local authorities and emergency teams and lastly, State and federal authorities and emergency teams. The responsibilities attributed to the Department of Health under 3.5c. is actually the responsibility of the Bureau of Pollution Control. This must be corrected.
13. G-4b - Identification of Hazardous Material - Describe in more detail how released material will be identified. Which facility records and manifests will be used? Can material safety data sheets be used? What parameters will be analyzed for a chemical analysis?
14. G-4d - Control Procedures - Specific response and control procedures to be taken in the event of a spill or release of a hazardous waste must be given. An example which may be adapted by Vertac is attached. Section 264.227(b)(1) requires that when a dike leak is detected, flow into the impoundment must be shut off or stop the addition of wastes into the impoundment.
15. G-4e - Prevention of Recurrence of Spill or Release - Give a description of the necessary steps to be taken during an emergency situation to ensure that spills do not occur or recur. Steps should include: shut-down of processes and continued monitoring of them; and collecting, containing and treating released wastes. An example is also attached.
16. G-4f - Storage and Treatment of Released Material - There must be a description of the provisions for treatment, storage, or disposal of any hazardous wastes resulting from a release. A description of equipment available and procedures for deployment is needed. Also describe the methods to contain, treat, and clean up a hazardous release and decontaminate the affected area. An example is attached.

27. I-1c - Maximum Inventory - Describe the maximum inventory of wastes that could be in storage at any time during the life of the facility.

28. I-1d - Decontamination - Describe the steps needed to decontaminate facility equipment during and after closure.

29. I-1e - Closure Schedule - Give an estimated expected year of closure. The closure schedule must include the total time to close, the time for the different closure activities, and inspection schedule during closure.

30. I-2 - Post Closure - Describe how the functioning of the monitoring wells will be ensured as required by 264.118(a)(2)(ii).

31. I-3 - Notice in Deed - A copy of the property deed is required with a notation concerning management of hazardous waste on the property.

32. I-4 & I-6 - Closure and Post Closure Cost Estimates - More detailed estimates are required for each item (i.e., labor, decontamination, erosion control, engineer's certification, earthwork, and equipment). Unit costs and quantity descriptions are needed. All costs must be estimated on a worst case basis, assuming a contractor will do the work.

33. I-5a - Closure Trust Fund - Because the permit will be written for a ten-year period, the Trust Fund pay in schedule must be amended to 10 years instead of 20 years.

34. I-8 - Liability Insurance - The certificates for both Sudden and Non-Sudden Insurance are worded improperly. These must be corrected. Copies of properly worded forms are attached.

35. Groundwater Monitoring -

a) Groundwater data cannot be "cast out" without resampling or reanalysis.

b) A more detailed scaled engineering drawing of sketch C(2) in the application is needed. Section 270.14(c)(3) requires a topographic map with delineation of the waste management area, the property boundary, the proposed "point of compliance", the location of groundwater monitoring wells, groundwater flow direction and groundwater contours.

c) Section 270.14(c)(5) calls for detailed plans and an engineering report describing the proposed groundwater monitoring program as required by Section 264.97. The application is deficient in the following areas: A

description of the sampling and analysis procedures (i.e., sample collection, sample preservation and shipment, analytical procedures and chain of custody control); a description of why these sampling and analytical methods are appropriate and; a description of the methods and recording procedures for determining the groundwater surface elevation each time the groundwater is sampled.

- d) Submit engineering drawings describing the installation of wells 5, 6, 7 and 8 including the location of the well screen.
- e) The following indicator parameters must be analyzed for in the monitoring program: pH, specific conductance, TOC, TOH, DNHP, Toxaphene, Atrazine, Total Phenol, and Benzoic Acid. Four replicate samples must be analyzed for at each compliance point well.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

OCT 18 1983

4AW-RM

Mr. Jack M. McMillan, Director
Division of Solid/Hazardous Waste Management
Mississippi Department of Natural Resources
Post Office Box 10385
Jackson, Mississippi 39209

Re: Vertac Chemical MSD990714081
First Chemical MSD33417031

Dear Mr. McMillan:

Enclosed are our comments concerning Vertac Chemical, located in Vicksburg, Mississippi, and First Chemical, located in Pascagoula, Mississippi. The review for each facility was done in two parts and is arranged as follows:

Section I	Completeness Review - Vertac Chemical
Section II	Completeness Review - Vertac Chemical Groundwater Monitoring
Section III	Completeness Review - First Chemical
Section IV	Completeness Review - First Chemical Groundwater Monitoring

If there are questions, please call Caron Bell of my staff at 404/881-3067.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "James H. Scarbrough for".

James H. Scarbrough, Chief
Residuals Management Branch

Enclosures

Section I

Vertac Chemicals

1. The topographic map required under 40 CFR §270.14(b)(19) does not extend 1000 feet beyond plant property.
2. It appears that the south plant is located in the 100 year flood plain. If this is the case, the application needs to address the requirements of 40 CFR §§ 270.14(b)(11)(iii) and (iv) and §264.18(b) concerning the storage tanks and surface impoundment.
3. The requirements of 40 CFR Part 264.13(b)(1) concerning parameters and rationale in the Waste Analysis Plan (W.A.P.) should be met.
4. Since Mississippi will be permitting the two (2) tanks used for off-site disposal, these will have to be included in the application. Vertac states in Section (b)(2) that they did not include information on the two (2) tanks because tank contents are turned over approximately every five (5) days and, therefore, are not subject to regulation.

Additional information should also be submitted for the 1.0x6x10⁶ gallon tank used to hold the neutralized wastewater. This information should include tank construction material, liquid height in the tank, piping, fill/overflow controls, operating pressure and temperature, minimum shell thickness, etc.

5. More information should be given concerning security. In particular, the requirements of 40 CFR §264.14(b)(2)(ii) concerning means to control entry should be met.
6. The inspection schedule should be revised to include tanks, the surface impoundment, the Emergency Checklist, security, alarms, etc. Also, a statement in section a(5) that tanks do not have to be included on the inspection schedule should be deleted.
7. The requirements under 40 CFR §264.32 concerning equipment should be met.
8. The requirements concerning loading/unloading operations under 40 CFR §270.14(b)(8)(i) should also include tanks.
9. The following comments concern the Contingency Plan (CP):
 - a. A description of facility operations and the addresses and phone numbers of the Emergency Coordinators (EC) should be included.
 - b. A statement authorizing coordinators to commit necessary resources should be included.
 - c. Criteria for implementing the plan should be given.
 - d. The requirements of 40 CFR §§264.56(b), (c), (d), (e), (g) and (h) must be met.
 - e. The requirements of 40 CFR §§264.52(a), (e), and (f) must be met.

Some of the above requirements are discussed in the application, however, this discussion consists only of stating the regulations and saying they will be complied with but contains no information as to how compliance will be achieved.

10. The Closure Plan should address closure for the tanks.
11. The financial assurance cost should include maximum inventory.

Section II
Completeness Review - Groundwater Monitoring

Vertac Chemical Corporation

- 270.14(c)(1) - Although the analytical results of 1 1/2 years of groundwater monitoring were provided, the submittal did not include data evaluation. A cursory examination of the data revealed that mcl's for lead, chromium, cadmium and mercury were exceeded at least once for wells 1, 2, 3, and 4 and that the specific conductance of well 4 samples was elevated. Utilizing the specific conductance values reported for wells 1 and 4, the statistical test specified in 40 CFR 265.93(b) was performed. The analysis indicated a significant increase in specific conductance in well 1 above the background value.
- 270.14(c)(2) - The requirements of this section appear to have been met. Judging from the geologic conditions reported by the consultant, the appropriate zone for monitoring was selected.
- 270.14(c)(4) - Although sufficient data has been collected to indicate groundwater contamination no effort was made by the applicant to delineate the contaminant plume.
- 270.14(c)(5) - The application is deficient with respect to the requirements of these sections.
264.97
264.90(b)(4) Areas of deficiency are as follows:
1. The well locations relative to the surface impoundment were not well defined (the location map was not scaled).
 2. Construction details (location of screens, gravel pack and grout) were lacking for some wells.
 3. The description of the monitoring program failed to address sampling methodology, analytical procedures, chain of custody, documentation of sampling and analytical procedures, and procedures for determining groundwater elevation with each sample.
 4. The proposed detection monitoring program did not include appropriate parameters from Appendix VIII.

270.14(c)(6) -
264.91(a)(4)
264.98(a)

The detection program prepared by the applicant does not satisfy the requirements of these sections. Specific shortcomings include:

1. Waste constituents or reaction products which would indicate the presence of hazardous constituents were not considered.
2. Procedures to establish background values for each monitoring parameter that would be specified in the permit were not proposed in the application.
3. Sampling and analytical procedures were not proposed.
4. Procedures for annual determination of groundwater flow rate and direction were not proposed.
5. Procedures to be implemented if a statistically significant increase in a monitoring parameter is identified were not specified.

EPA Comments by Telephone Oct. 13, 1983

✓
Contract

- 1) Facility Description
 - a) Tanks in 100yr. floodplain?
 - b) Topo map 1000 ft beyond
- 2) Waste Characteristics
264.13 b(1) Did not include why parameters were used.
- 3) Process Info. - Tank
Dooz tanks have no info
Other tanks need all other info.
- 4) Security - More info on fence & how control access
- 5) Inspection - Revise checklist
- 6) 264.34 Equip - No descrip of fire^{equip.}, etc.
- 7) Loading - Unloading 270.14(b)(3)(i)
- 8) Contingency - Facility description, statement of ability to respond with necessary equip. How will they respond. Cited 264 requirements needed.
- 9) Closure - Did not address tank closure
- 10) Financial Assurance - Cost estimate did not include maximum inventory.

Surface Impoundment

- 1) Ground Water - Summary over 1 1/2

drinking water
are exceeded
Lead, chrom, more

August 24, 1983

Mr. Jim Scarbrough, Chief
Residuals Management Branch
U. S. Environmental Protection Agency
Region IV
345 Courtland Street
Atlanta, GA 30365

Dear Mr. Scarbrough:

Enclosed are copies of two land disposal Part B applications, per the MOA. Our responses to the facilities must be mailed by October 11 to comply with the 60-day completeness review requirement. Any EPA-supplied comments to be included in these responses must be received by this office no later than October 5.

Thank you for your attention to these items.

Sincerely,

Charles Estes, PE
Division of Solid Waste Management

CE:cbl
Enclosure
cc: Doug McCurry



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

TELEX 53927

August 10, 1983

Mr. Chuck Estes
Division of Solid Waste Management
Mississippi Department of Natural Resources
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209

Dear Mr. Estes:

Attached are three copies of the RCRA Part B permit application for our Vicksburg facility. I understand that Mississippi has primacy on the entire RCRA program and that I need not send a copy to EPA-Region IV. The State will do all the necessary coordination with the EPA.

A separate copy of surface impoundment construction details is being sent to both you and Mr. Spengler directly by MCI. Hopefully, this will help expedite future reviews of those particulars with EPA-Region IV.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Very truly yours,

Richard D. Karkkainen
Director of Environment and Safety

RDK/bh

cc: F. L. Ahlers
Vicksburg Facility

OUTLINE FOR
PLANNING PURPOSE
ONLY

PK
5/31/83

- Legend: K = Karkkainen
 M = Maraman
 MCI = MCI Consulting Engineers, Inc.
 E = Write up exists in draft form
 NA = not applicable
 NA* = not applicable to date, applicability would trigger additional level of effort and need for outside help.

Requirement:

Status Code:

Part A - Resubmit and modify by:

1. Removing application for storage of drums of hazardous waste longer than 90 days K
2. Removing from the list of hazardous waste those items that were listed to cover potential contaminants in 1000 unknown drums on hand at the time of original application. K

Part B - Paragraph 122.25 "Contents"

a. General information

1. Facility description K/E
2. Hazardous waste analyses M/E
3. Waste Analysis plan M
4. Security procedures K/E
5. Hazardous waste facility inspection schedule K/E
6. Waiver NA
7. Contingency plan K/E
8. Description of procedures, structures or equipment for hazardous waste management facilities K
 - i Prevent unloading hazards
 - ii Prevent runoff
 - iii Prevent contamination of waste supplies
 - iv Mitigate effects of equipment failure
 - v Prevent personal exposure
9. Precautions to prevent reaction or ignition of wastes NA
10. Traffic pattern K
11. Facility location information K
 - i Political jurisdiction K
 - ii Seismic standards NA

iii Floodplain standards	MCI
A. Hydrodynamic and hydrostatic forces	
B. Structure will not wash out	
12. Personel training procedures	M
13. Closure and post closure plan	K/E
14. Notification in deed	K
15. Closure cost estimate	K/E
16. Post closure cost estimate	K/E
17. Copies of insurance policies	K
18. State financial mechanism	NA
19. Topographic map (1" = 200') showing	K/E
i scale and date	
ii 100 year flood plain area	
iii surface waters	
iv surrounding land use	
v wind rose	
vi orientation	
vii legal boundaries	
viii access control	
ix water wells	
x structures	
xi barriers	
xii operational units	
b. Specific information	
1. Container storage (drums)	NA
2. Tank storage	K
i design standards	
ii design specifications	
iii tank dimensions	
iv piping, instrumentation	
v feed systems	
vi reactive wastes	
3. Surface impoundments	
i list of hazardous wastes	M
ii plans and engineering report	MCI
A. migration prevention	
B. overtopping prevention	
C. structural integrity	
iii groundwater monitoring exemption	NA
iv inspection	MCI
v certification attesting to structural integrity of dike or statement that certification will be supplied upon completion of construction	MCI
vi procedure to remove from service	K
vii closure plan	K/E
viii ignitable or reaction waste	NA
ix incompatible waste	K
4. Waste Piles	NA
5. Incinerators	NA

- 6. Land treatment NA

- C. Additional Information - groundwater protection for operators of hazardous waste surface impoundments
 - 1. Summary of data to date K
 - 2. Identification of upper most aquifier K/E
 - 3. Proposed point of compliance K
 - 4. Description of plume NA*
 - 5. Proposed further groundwater monitoring program KE
 - 6. If no hazardous constituents detected K
 - i list of indicator parameters
 - ii groundwater monitoring system description
 - iii background values
 - iv sampling, analysis and statistical comparison procedures
 - 7. If hazardous constituents have been detected supply details NA*
 - 8. If hazardous constituents have been detected establish evidence of absence of health hazard or establish corrective action NA*



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

JUL 18 1983

4AW-RM

Mr. Chuck Estes
Division of Solid/Hazardous Waste
Management
Mississippi Department of Natural Resources
P.O. Box 10385
Jackson, Mississippi 39209

Re: Vertac Chemical Corporation, Vicksburg
Surface Impoundment Dike Stability Analysis

AIR & WATER POLLUTION
CONTROL COMMISSION
STATE OF MISSISSIPPI

1983 JUL 20 AM 9:07

RECEIVED

Dear Mr. Estes:

In accordance with your request to Don Hunter of my office, EPA has reviewed the dike stability analysis report for Vertac, prepared by MCI/Consulting Engineers.

We are in agreement that the dike should be modified. The report showed it to be unstable as was proven by the dike failure in February 1983. The consulting engineer has suggested three options for providing a more stable dike. Our preference on the options is Option 1, followed by Option 3. Option 1 provides more resistance to a sliding failure due to slip at the base of the dike. We recommend that Vertac consider at least a 2-1/2:1 slope on both slopes and preferably a 3:1 slope. We also recommend protective material such as rip rap on the creek side of the slope. Any option selected should include a provision for stripping the existing surface to a solid base and a key trench.

The idea of providing toe drains for the dike will help to reduce pore pressure and neutral stress in the dike material. This will increase shear strength and lower the likelihood of failure.

It is our opinion that the applicant may select any of the three options for his Part B application; however, final design calculations for the selected proposal must be approved by the permitting agency before construction can begin. These calculations must be based on the actual characteristics of the soil to be used in dike construction and on construction specifications used.

We hope this information proves helpful. Please contact Hal Emmett at 404/881-3966 if you have additional questions.

Sincerely yours,

James H. Scarbrough, Chief
Residuals Management Branch



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

TELEX 53927

May 31, 1983

RECEIVED
JUN 2 REC'D

Mr. Chuck Estes
Mississippi Department of Natural Resources
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209

DEPT OF NATURAL RESOURCE
BUREAU OF POLLUTION CONTROL

Dear Mr. Estes:

Attached is a copy of a draft revised RCRA Part A and copy of draft paragraph 122.25 (a) General Information (1) Facility Description.

In addressing RCRA Part B paragraph 122.25 (b) Specific Information (1) Container Storage (2) Tank Storage and (3) Surface Impoundments, I had planned the following:

1. Eliminate greater than 90 day drum storage in order to keep the inventory of drums to a minimum; therefore, omit (b) Specific Information (1) Container Storage from the application.
2. Include (b) Specific Information (3) Surface Impoundments for the 3 million gallon surface impoundment and (b) Specific Information (2) Tank Storage for the 1.6 million gallon storage vessel for neutralized water from the DNBP process, and two 15,000 gallon storage vessel for acidic water from the DNBP process.

It is possible that only the 3 million gallon surface impoundment should be included in the (b) Specific Information section of Part B. The neutralized DNBP wastewater stored in the 1.6 million gallon storage tank is not, I believe, a RCRA hazardous waste at that point. The acidic DNBP wastewater stored in the two 15,000 gallon storage tank is only stored for a few days, in any case, complete turnover of tank contents is significantly less than 90 days.

I have no objection to including specific information on the tanks within the Part B application but request your decision on whether I should or should not.

Mr. Chuck Estes
May 31, 1983
Page 2

Similarly, I assume the way to handle salt cake from MSMA (RCRA Hazardous Waste Number K031) is to include (a) General Information. There is nothing that I can think of that would be covered by (b) Specific Information.

Best regards,



Dick Karkkainen
Director of Environment and Safety

RDK/bh

Enc.

cc: R. J. Maraman



MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209
(601) 961-5171



MEMORANDUM TO FILE

COMPANY: Vertac Chemical Corporation
MEETING OF: March 14, 1983
ATTENDING: Dick Karkkainen and Bob Mariman, Vertac Chemical Corporation
Steve Spengler and Chuck Estes, Bureau of Pollution Control

DETAILS:

We discussed the Part B Application for hazardous waste storage which is currently being assembled. There was some discussion about the details and time between the detection of the breach in the impoundment and the notification to our office. Mr. Karkkainen and Mr. Mariman agreed to send an amendment to their written report which will give the events and time during this period in more detail.

Steve and I stressed that the Bureau would like to see Vertac rapidly pursue a permanent solution to the problems at the impoundment. The Part B Application is due in August. The impoundment and its problems must be addressed and resolved before a permit can be issued. Everyone agreed that a study must be undertaken by Vertac before construction can get underway. Steve and I indicated that we would send Vertac a letter requiring them to begin a study very soon which will address the impoundment.

We also discussed the inadequacies of the contingency plan since there appeared to be a longer than necessary amount of time before our office was notified. The contingency plan and inspection form will be modified to minimize the chance of the same kind of event reoccurring. The operators at the impoundments will now be trained to inspect the integrity of the impoundment immediately upon noticing a rapid drop in the impoundment level.

Charles Estes, P.E.

CE:cbl



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

TELEX 53927

November 17, 1982

RECORDED

NOV 19 REC'D

Mr. Sam Mabry
Division of Solid Waste
Mississippi Department of Natural Resources
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209

DEPT OF NATURAL RESOURCE
BUREAU OF POLLUTION CONTROL

Dear Mr. Mabry:

We at Vertac were somewhat puzzled at the tone of press reports of the action of the Natural Resources Commission on November 10, 1982. The report prompted the attached communication to Mr. Estes. On reflection of events I think it probable the press accounts correctly implied a frustration within the Division of Solid Waste on the pace of events with regard to our closed out landfill/surface impoundment area in as much as there were statements made that this action would get Vertac's attention. Several people have asked me why the Division of Solid Waste made such a press release; I had assumed it was independent reporting.

We have known since the latter part of August, 1982 of the Division's intent to have a Commission Order issued which would set forth a series of specific actions and planning by Vertac, dates by which they must be submitted to the Division, review and approval by the Division and execution of the plan by Vertac. We welcomed this formalization of events and were prepared for it to issue as a routine matter of business not a matter of implied punishment.

A review of additional facts are:

1. The area of note became inactive in 1975.
2. We initiated these first remedial steps beginning in 1979 (well in advance of any regulatory interest):
 - a. Dug trenches causing impoundments to drain to the treatment pond followed by discharge to the activated carbon system.

- b. Allowed the area to dry.
 - c. Removed the impoundments by grading to avoid rainwater entrapment.
3. It was obvious that additional remediation would be necessary when we submitted results of EPA analyses of erosional (not leachate) areas in late April, 1982.

We had no perception of haste in 1982:

1. Internal Vertac planning as to ultimate end use beyond remediation of the area was not and still is not complete.
2. The Division of Solid Waste had grown strong and correctly demanded review of remediation and end use planning.
3. Groundwater monitoring, a brief hydrogeologic assessment, soil testing and knowledge that buried wastes were "high and dry" as long as an integral cap could be maintained and erosion controlled caused us to believe we could establish final remediation.
4. Additional groundwater monitoring between the closed out landfill/surface impoundment area and the creek was deemed necessary to prove the absence of groundwater contamination, however, the area is inaccessible. In order to perform temporary remediation and create a road for drilling accessibility, I proposed a temporary plan in late August. That plan was turned down for insufficiency of engineering drawings and detail as to final efforts irrelevant to the temporary plan.

We will with vigor comply with the dates outlined in the Commission order in complete cooperation with the Division. That plan involves:

1. Partial environmental assessment by extensive grid soil sampling and analysis.
2. Complete remedial plan details.
3. Partial remediation sufficient to allow drill rig access.
4. Completion of environmental assessment by drilling additional wells.

Mr. Sam Mabry
November 17, 1982
Page 3

I would have preferred and still insist it is the more logical plan to proceed stepwise as I have been wanting to do. This plan would have involved:

1. Partial environmental assessment by grid sampling.
2. Partial remediation sufficient to allow drilling access.
3. Completion of environmental assessment by drilling additional wells and additional grid sampling.
4. Complete remedial details.

My method of problem solving has always been and always will be, unless there is regulatory instructions to the contrary, to do those things which allow problem definition then problem solution. I sought in August to do immediate temporary remediation to alleviate problem potential and allow further assessment. I hardly think Vertac's attention to the problem was lacking. I think instead Vertac was exhibiting cooperation with the review and oversight process. Had I known this matter would be presented to the Commission and the press in other than a professional and business like manner, I would have appeared at the meeting to present our point of view but additionally to reassure that we would defer to the judgement as expressed in the final order.

We have solicited the help of an engineering consultant, independent of previous work, with expertise in the required areas to allow us to move forward with vigor. We will gladly meet with all who would have concern or doubt on our intent and ability to comply with all Federal and State regulations and all concerns of the Division of Solid Waste as those concerns are logically and clearly made known. Clearly something has gone awry but we intend to make this entire issue a learning experience after which we can improve our total efforts. May I reaffirm that we are very, very sensitive to releases to the press.

Best regards,



Dick Karkkainen
Director of Environment and Safety

RDK/bh

Attch.



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

TELEX 53927

November 17, 1982

Mr. Charlie L. Blalock
Executive Director
Mississippi Department of Natural Resources
P. O. Box 20305
Jackson, Mississippi 39209

Dear Mr. Blalock:

We have your letter of November 11, 1982 and the enclosed Commission Order No. 599-82.

This matter has been reviewed by the Vertac Chemical Corporation management. We wish to inform the Department that the soil sampling program was completed on October 28, 1982 in cooperation with the Division of Solid Waste. These samples are currently being analyzed in the Vertac laboratories, these results will be forwarded in compliance with the date set forth in your Order. Split samples of those taken, currently being analyzed, have been delivered to your laboratories. Our personnel as well as consultants are confident that they can meet the required dates in your items 2,3 and 4. If there are any changes or any interruptions, we will be advising you.

Mr. Dick Karkkainen, Vertac's Director of Environment and Safety Affairs is responsible for this corporate function and will keep you posted on developments.

Very truly yours,

R. A. Guidi
Vice President Operations

RAG/bh

CC: C. P. Bomar, Jr.
R. D. Karkkainen

RECEIVED
NOV 19 1982

Department of Natural Resources



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-8851

TELEX 53927

November 12, 1982

Mr. Chuck Estes
Division of Solid Waste
Mississippi Department of Natural Resources
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209

RECEIVED

NOV 15 REC'D

DEPT. OF NATURAL RESOURCE
BUREAU OF POLLUTION CONTROL

Dear Mr. Estes:

We are pleased that the National Resources Commission adopted the compliance order setting forth a series of specific actions and dates by which they must be submitted by Vertac reviewed by the Bureau of Pollution Control and then executed by Vertac with regard to the closed out landfill/surface impoundment area of our Vicksburg facility. The action by the Commission was a logical step in a sequence of events to effect an end result obvious to all as necessary.

We were somewhat dismayed and embarrassed at the press reports and publicity arising from the Commission meeting. Such reports convey a counterproductive tone in as much as they then force a defensive posture rather than action on the task at hand, that of accomplishing good. Therefore, I have written this letter and simply ask that it be placed in our public file. Should that file be perused by the press they could then become informed. I do not intend to reply to the press directly, but I will review a few of the facts in this letter as to our compliance with regard to the regulations that are under the purview and concern of the Division of Solid Waste and our intent to comply with vigor as needs are clearly made known. The financial conditions of the company mandates that plans and actions be carefully established and goals achieved with a judicious use of funds.

We established the minimum RCRA groundwater monitoring program on a timely basis and are performing analyses as required. We went beyond minimum in that we performed a hydrogeologic investigation.

There was concern by the Bureau of Pollution Control as to whether we were monitoring the correct groundwater elevation since the water yield was low. I have found no disagreement among hydrogeologists that monitoring and protecting the uppermost water will then protect important lower aquifers.

Mr. Chuck Estes
November 12, 1982
Page 2

It is obviously desirable to monitor groundwater between the closed out landfill and creek and we intend to do so once we have received permission to do remedial work on the hill, one part of which will be to build the road that will allow access to the area presently inaccessible to a drill rig.

We submitted in late April, 1982 the results of EPA sampling in the area. It is important to note that pesticides have not been detected in Stout's Bayou, Hatcher Bayou or the groundwater. It is a property of most pesticides that they will adhere strongly to sediment or soil and migrate as that soil moves. The EPA report showed that effect, the evidence of pesticides in two areas of high erosion that need remediation. The pesticides are not in any danger of leaving our 600 acre site; however, we do need remedial effort or perpetual care. The detection of pesticides in the erosional areas is under no circumstance indicative of properties of the soil in the hill in general.

We perhaps confused the issue by establishing the area as the site of biological facility for the future. The location we claim is logical and sound but it is an irrelevant issue and we will not bring it up until the RCRA and CERCLA issues have been fully resolved. Original plans included the biological facility which could not be funded. There were delays involved in internal Vertac planning.

In June we reported we would sample the soil on the "high hill" and analyze for pesticides prior to doing any construction. We did as we said and reported that soil to be clean in August.

In August we also reported that our plans to build the biological facility were deferred. On that basis we requested permission to perform temporary remedial work on the only aspect of this entire issue that has been defined as a problem, the high levels of pesticide found in the erosional area. We were denied permission based on insufficiency of number of samples and perhaps lack of trust. We agreed to perform extensive grid sampling and splitting of samples with the State. The program was carried out as a joint effort with the State on October 28, 1982.

We viewed the establishment of a firm plan by the Commission on November 10, 1982 as the next step in a cooperative effort.

Mr. Chuck Estes
November 12, 1982
Page 3

If there is any confusion as to our intent then I think it is an absolute necessity that we set up informational meetings with whomever will cast aspersions on our intent to comply with vigor on all Federal and State regulations.

Best regards,

A handwritten signature in cursive script, appearing to read "Dick Karkkainen".

Dick Karkkainen
Director of Environment and Safety

RDK/bh



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

REPLY TO: P. O. BOX 3
VICKSBURG, MS 39180
(601) 636-1231

October 29, 1982

RECEIVED
NOV 2 REC'D

Mississippi Department of Natural Resources
Bureau of Pollution Control
P.O. Box 10385
Jackson, MS 39209

Attention: Charles Estes, P.E. Division of Solid
Waste Management

DEPT OF NATURAL RESOURCE
BUREAU OF POLLUTION CONTROL

Subject: Check List, Your Letter of August 30, 1982

1. Operating Record:

Attached are three hazardous waste operating records: The Hazardous Waste Inventory, Hazardous Waste Added to Inventory and Hazardous Waste Removed from Inventory.

The attached Hazardous Waste Inspection Sheet has been revised to include inspection of the calgon units and to record action taken to correct deficiencies.

2. Closure Plan:

Attached is the closure plan which was revised to include the estimation of Hazardous Waste Inventory, steps to decontaminate the facility equipment in the DNEP Hill Storage Tank, surface impoundment, DNEP Plant facility, the Toxaphene Plant facility, the Parathion facility, and the Atrazine facility.

3. The anticipated date of closure is included in the above.

4. We wish to go beyond your suggestion on containers.

A complete inventory of the hazardous waste drums was completed in September 1982.

It was found that some of the identification did not agree with the original inventory and contents of some other drums were unknown.

The container contents are being rechecked and application will be made to an Alabama firm for disposal of all of the waste drums.

The above is in progress and should enable us to dispose of waste more rapidly and efficiently than in the past.

5. A 2 foot freeboard is being maintained in the surface impoundment.

Sincerely,

R.F. Maraman
R.F. MARAMAN

FILE COPY

October 7, 1982

Mr. Dick Karkkainen
Vertac Chemical Corporation
24th Floor, 5100 Poplar
Memphis, Tennessee 38137

Dear Mr. Karkkainen:

During our meeting of September 24, 1982, we discussed moving soil from the upper hill area to be used as cover for major erosional areas on the east and west side of the old landfill and reclaimed pit areas. We are in agreement in principal with this plan as a temporary measure; but we must have a more complete analysis of existing conditions before we can accept the plan. We also want to insure that this measure fits into the final plan for the entire area.

To make a determination a soil sampling project for the entire area must be conducted. This will determine the extent of contamination of on-site soils and the potential for leaching of contaminants. Our office will assist in taking soil samples to be analyzed by your lab. We must have details on the temporary and final construction work for the entire area. This includes topo maps, a timetable, a description of the final cover and vegetation. A description of the final disposition of the contaminated sediments in the ditches bordering the hill area must be addressed. Also, a description and location of additional groundwater monitoring wells needed to meet RCRA requirements must be addressed.

The soil sampling program should begin immediately. Please contact our office to set a time which is convenient for you. Should you have any questions, please contact our office.

Sincerely,

Charles Estee, P.E.
Division of Solid Waste Management

CE:rl



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

TELEX 53927

September 28, 1982

RECEIVED

SEP 30 REC'D

Mr. Charles Estes
Mississippi Department of Natural Resources
Bureau of Pollution Control
Division of Solid Waste Management
P. O. Box 10385
Jackson, Ms. 39209

DEPT OF NATURAL RESOURCE
BUREAU OF POLLUTION CONTROL

Dear Mr. Estes:

As a follow up to my letter of August 24, 1982 and our subsequent conversations, I have attached a sketch and herewith propose additional "high hill" locations for purposes of sampling and analyzing to additionally confirm our assertion that that the "high hill" dirt is sufficiently clean to use for remedial work in the two erosional areas identified by the EPA as sampling points VL-002 and VL-003.

The immediate objective of this initial effort would be to move approximately 2,000 cubic yards of dirt for remedial work. With reference to the sketch the top of the "high hill" would be removed to the 125 feet elevation. This is not to be confused with a long range objective of bringing the high hill elevation to 110 feet which effort would involve movement of approximately 80,000 cubic yards of dirt.

I propose that while we are sampling that we can expand the sampling grid over the entire "high hill" area for purposes of ascertaining whether the entire hill of dirt is sufficiently clean to allow eventual progress toward the long range objective.

I propose seven grid samples each grid consisting of four sampling points. At each of the sampling points a hand augered composite sample to a depth of four feet would be taken. The four samples within a grid would then be composited and a split sample given to the State. Our Vicksburg laboratory would analyze the seven grid samples for atrazine, DNBP and toxaphene.

Mr. Charles Estes
September 28, 1982
Page 2

With reference to the sketch the grid samples are defined as follows:

<u>Grid Sample</u>	<u>Sampling Point</u>
1	A,B,C,D
2	E,F,G,H
3	I,J,K,L
4	M,N,O,P
5	Q,R,S,T
6	U,V,W,X
7	Y,Z, ∞ , β

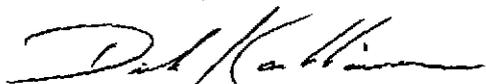
Our efforts would not be intended as an academic exercise in sampling and analyzing. If samples 1 and 2 turned out to be comparable to the results obtained for the "high hill" sampling at a depth of 35 feet then we would anticipate the lack of objection in using the dirt within those grids to a depth not to exceed 4 feet. The dirt would be bulldozed to the two erosional areas on a best effort, best field judgement basis which effort is intended as immediate remedial maintenance probably but not necessarily part of the final plan for the area.

With regard to the long range plan we acknowledge that the information provided by analyses alone may not be sufficient for the State to make final judgement on the adequacy or adviseability of the long range plan, that details may not have been adequately presented, and that a timetable of accomplishment does not exist.

Evidence of gross contamination would cause a mutual decision to create an alternative plan. The long range plan is of course based on the assumption that "high hill" dirt from an elevation of 110 feet upward is clean, which assumption is based on examination of the factual history of the site without preconcieved notion and also the remedial efforts to date.

I would like to be present for at least the initial part of this effort. If you are in agreement the last week of October is good.

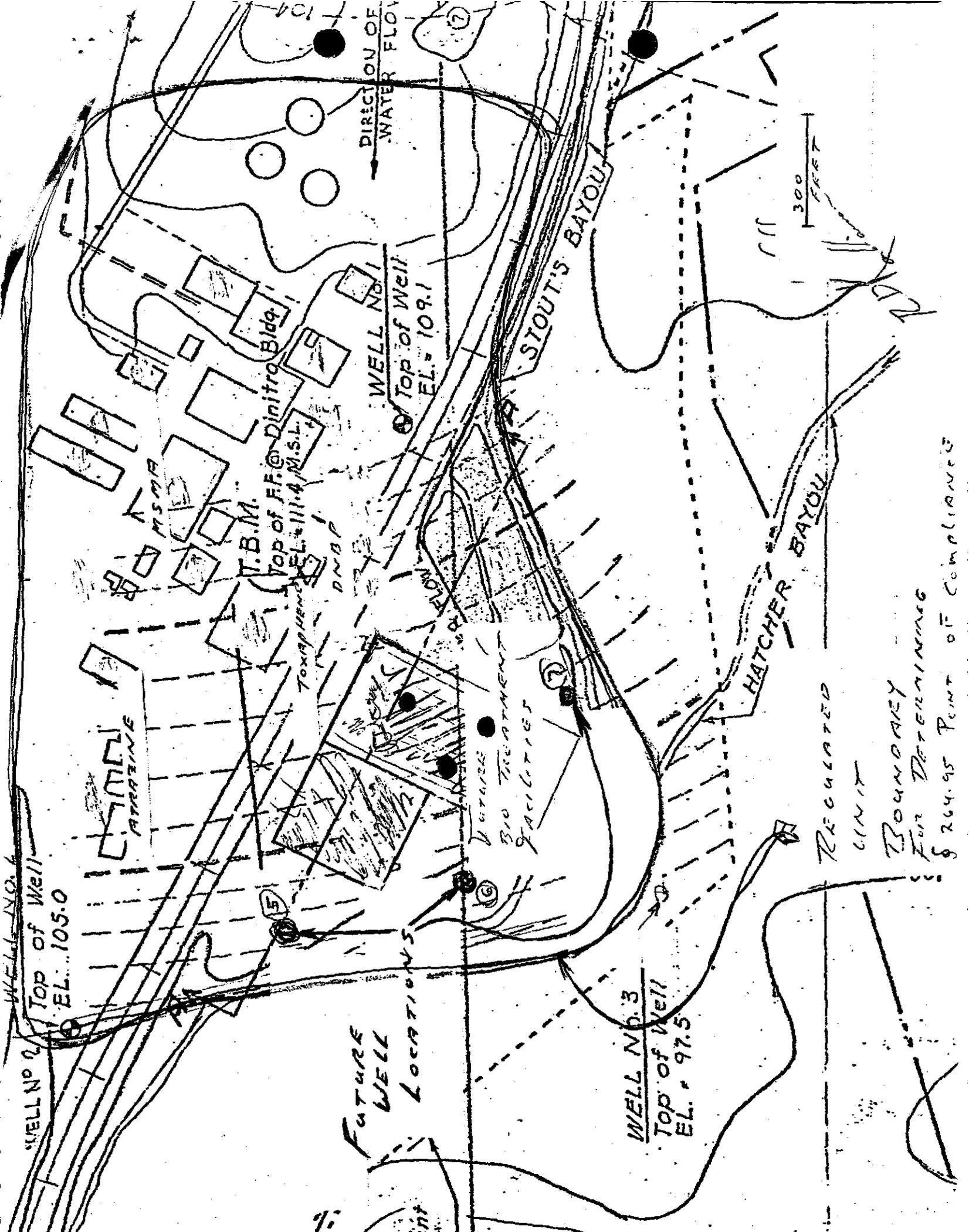
Best regards,



Dick Karkkainen
Director of Environment and Safety

RDK/bh

Attch.



WELL NO. 1
TOP OF WELL
EL. 105.0

FUTURE
WELL
LOCATIONS

WELL NO. 3
TOP OF WELL
EL. 97.5

WELL NO. 2
TOP OF WELL
EL. 109.1

T.B.M.
TOP OF F.F. @ DINITRO BLDG.
ELEV. 111.4 M.S.L.

300
FEET

REGULATED
UNIT
BOUNDARY
FOR DETERMINING
264.95 FEET OF COMPLIANCE

DIRECTION OF
WATER FLOW

STOUT'S BAYOU

HATCHER BAYOU

VARIOUS
BIO TREATMENT
FACILITIES

ATMOSPHERIC
EMISSIONS

M.S.M.A.

TOXAPHENOL
D.M.B.P.

WATER FLOW

June 28, 1982

Mr. Dick Karkkainen
Vertac Chemical Corporation
24th Floor, 5100 Poplar
Memphis, TN 38137

Dear Mr. Karkkainen:

As we discussed by telephone on June 25, 1982, our office would like a written scope of operations for the remedial action planned at the inactive landfill at the Vicksburg facility. This should include a time schedule for the completion of all phases of the operation. In light of the high surface contamination indicated by the EPA sampling report, we expect to see steady progress towards the resolution of the problem.

As I mentioned in our telephone conversation we will be at the Vicksburg facility on the morning of July 7, 1982 for a joint State-EPA inspection. Should you have any questions, please contact our office.

Sincerely,

Charles Estes, P.E.
Division of Solid Waste Management

CE:cb

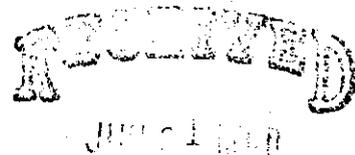


VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

TELEX 53927

June 18, 1982



Mr. Charles Estes, P.E.
Mississippi DNR
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209

DEPT. OF NATURAL RESOURCE
BUREAU OF POLLUTION CONTROL

RE: Your May 28, 1982 Letter

Dear Mr. Estes:

I agree that we should perform soil sampling and analyses prior to initiating construction in the vicinity of our closed out landfill and closed out ponds.

We have performed the soil sampling including auger drilling. The drilling was performed as part of the activity pursuant to dirt moving companies preparing beds to cut the hill area down to an elevation approximately 10 feet higher than the track elevation. The soil has been retained for analysis by us.

When we have completed the analyses, I will forward the results and sketch of where samples were taken.

It is important to emphasize that the cutting back of the hill will be done in the area of the closed out ponds rather than closed out landfill. Our intent is to make the closed out areas more secure rather than compound the problem.

On another matter, I have attached the internal announcement of Vertac entering the MSMA business. We have obtained the engineering package of a similar plant that was going to be built elsewhere which will be valuable in our being able to rapidly put together a package specific for our facility.

Best regards,

Dick Karkkainen
Director of Environment & Safety

RDK/bh

Attch.



INTERNAL CORRESPONDENCE

DATE: June 14, 1982

TO: All Vertac Employees

FROM: C. P. Bomar, Jr.

CC:

SUBJECT: Progress Versus Recession

In my last correspondence to you I indicated that the recession gripping American industry is also taking its toll on Vertac; and we, like most other companies, must take steps to prevent the deterioration of our hard-earned progress. At that time we escalated our efforts to find new business opportunities which would strengthen our company in the face of such adversity. I am pleased to announce today that we have found a new product opportunity which we feel fits well within the scope of Vertac's marketing and manufacturing capabilities and can generate substantial future earnings. We have arranged a financing package and are immediately initiating construction of a MSMA herbicide unit at our Vicksburg plant which will be scheduled for startup in early January. This venture will be similar in scope to the Dinoseb acquisition from Dow Chemical last fall.

However, in order to secure financing for this project and to keep our present lending agreements in place, we have had to assure our investor and lenders that we will not incur major losses in the second half of 1982. Given our current inventory levels and depressed market conditions, this represents a significant challenge for us all; but I have assured our investor and lenders that we can do it!

This will require very careful control of expenditures in the second half and a maximum selling effort. Even with this extra effort, we expect the second half to be particularly severe for our business, and we need to take further measures. Accordingly, I am announcing a temporary reduction in salaries effective July 1, 1982. We will reduce the salaries of all executive personnel (plant managers and above) by 8 percent. All other salaries will be reduced by 4 percent. I want to emphasize that this is a temporary defensive measure necessitated by poor performance in the first half and a bleak outlook for the second half. Just as

soon as we can assure ourselves that our operating profits will be above the minimum required level, these reductions will be lifted. You will note that in keeping with this management's belief that the largest number of our employees should be protected to the greatest extent possible, we are at this time requiring that the management group take the most severe cut. If conditions do not worsen, we should be able to restore salaries to their original level by the end of this year. If every employee makes a maximum effort to reduce costs, increase sales, and increase productivity, this could happen sooner.

Our new MSMA plant will insure employment for approximately 30 people, some of which are existing employees and some of which will be new personnel. Other projects currently under investigation could add additional new jobs and further increase profits in the not too distant future.

This is a most difficult economic period for the entire world, and a great many companies (both domestic and international) are closing plants and making salary reductions. However, few are announcing dramatic new plants such as our MSMA facility. I hope that you will agree with our belief that the opportunity for long-term progress and increased job security created by our present actions is worth the temporary sacrifice. I will certainly keep you posted on our progress in the second half.


President

CPB:ap

May 28, 1982

Mr. Dick Karkkainen
Vertac Chemical Corporation
24th Floor - 5100 Poplar
Memphis, TN 38137

Dear Mr. Karkkainen:

After studying the EPA sampling report on your Vicksburg facility, we believe that a thorough sampling program must be completed before beginning the planned dirt work at the closed-out landfill. Soil contamination levels should be determined before the planned dirt work begins so as not to compound the existing problems.

Any reports or results from a study of the contaminated landfill must be reviewed by our office before beginning the planned dirt work. Advance notice should be given to our office prior to moving any of the contaminated soil. We would like to discuss this matter with you further at your convenience.

Sincerely,

Charles Estes, P.E.
Division of Solid Waste

CE:cb



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

TELEX 53927

RECEIVED

MAR 26 REC'D

DEPT. OF NATURAL RESOURCE
BUREAU OF POLLUTION CONTROL

March 22, 1982

Mr. Chuck Estes
Division of Solid Waste Management
Mississippi Department of Natural Resources
Post Office Box 10385
Jackson, Mississippi 39209

Dear Mr. Estes:

This is an authorization to allow representatives of the firm, Allen & Hoshall, Inc. to review material in the files of the Bureau of Pollution Control pertaining to our facility in Vicksburg.

We anticipate hiring that firm, but have not yet done so, to design a biological waste water system. The tentative placement of the basin and tentative system sketch are attached. With the placement of the basin, we hope to complete the remedial effort on the "closed out reclaimed pit area" and "closed out landfill area" initiated some two years ago.

I assume you and Mr. Steve Spangler of the Water Division will cross communicate as we make progress on the design. I still owe Mr. Spangler a report confirming the reasons why we thought we could manage the present discharge of COD/BOD by temporary but costly use of activated carbon as we increased pesticide production from sporadic campaign production to full-time production, present wastewater management difficulties, and progress on steps being taken to reduce, eliminate, and prevent recurrence of present levels of COD/BOD.

Best regards,

Dick Karkkainen
Director of Environment & Safety

DK:ew

Attachment

CC: Mr. Steven Spangler



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-8851

TELEX 53927

December 15, 1981

Mr. David E. Lee, P.E.
Environmental Engineer
Division of Solid Waste Management
Mississippi Department of Natural Resources
Post Office Box 10385
Jackson, Mississippi 39209

Dear Mr. Lee:

Attached is a copy of our hydrogeological investigation at the Vicksburg facility. We have contracted with Environmental Laboratories, Inc. in Gulfport for quarterly analysis of the 31 water quality parameters.

Best regards,

Dick Karkkainen
Director of Environment & Safety

DK:ew

Attachment

RECEIVED

DEC 18 1981

DEPT. OF NATURAL RESOURCES
BUREAU OF POLLUTION CONTROL



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-8851

TELEX 53927

October 13, 1981

RECEIVED
OCT 16 1981

Mr. David E. Lee, P.E.
Environmental Engineer
Division of Solid Waste Management
Mississippi Department of Natural Resources
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209

DEPT OF NATURAL RESOURCE
BUREAU OF POLLUTION CONTROL

Re: Modification of our Effluent Pond Closure and Post Closure
Plans - Additional Detail and Costs Included

Dear Mr. Lee:

Upon closure, the liquid contents of the effluent pond would be pumped through the Calgon-activated carbon columns as per normal operating procedures at a typical operating expense of \$0.13 per gallon. This expense is part of the cost of the products we make and as such is not an extraordinary expense.

The sludge or sediment within the pond would be solidified by adding dirt and then allowing the dirt to dry. The hill to the south of the pond would provide a source of some of the dirt. Additional dirt would be obtained elsewhere from the 600-acre plant site and dumped within the pond area. After adequate drying, the dirt emplaced within the pond would be leveled such that the average depth would be one and one-half feet after compaction. Next, the embankments around the north and south sides of the dried out pond area would be knocked down. Grade would be sloped slightly toward the east end of the area. The final step would be the addition of one foot of clay atop the entire area followed by one-half foot of topsoil, then grass seed.

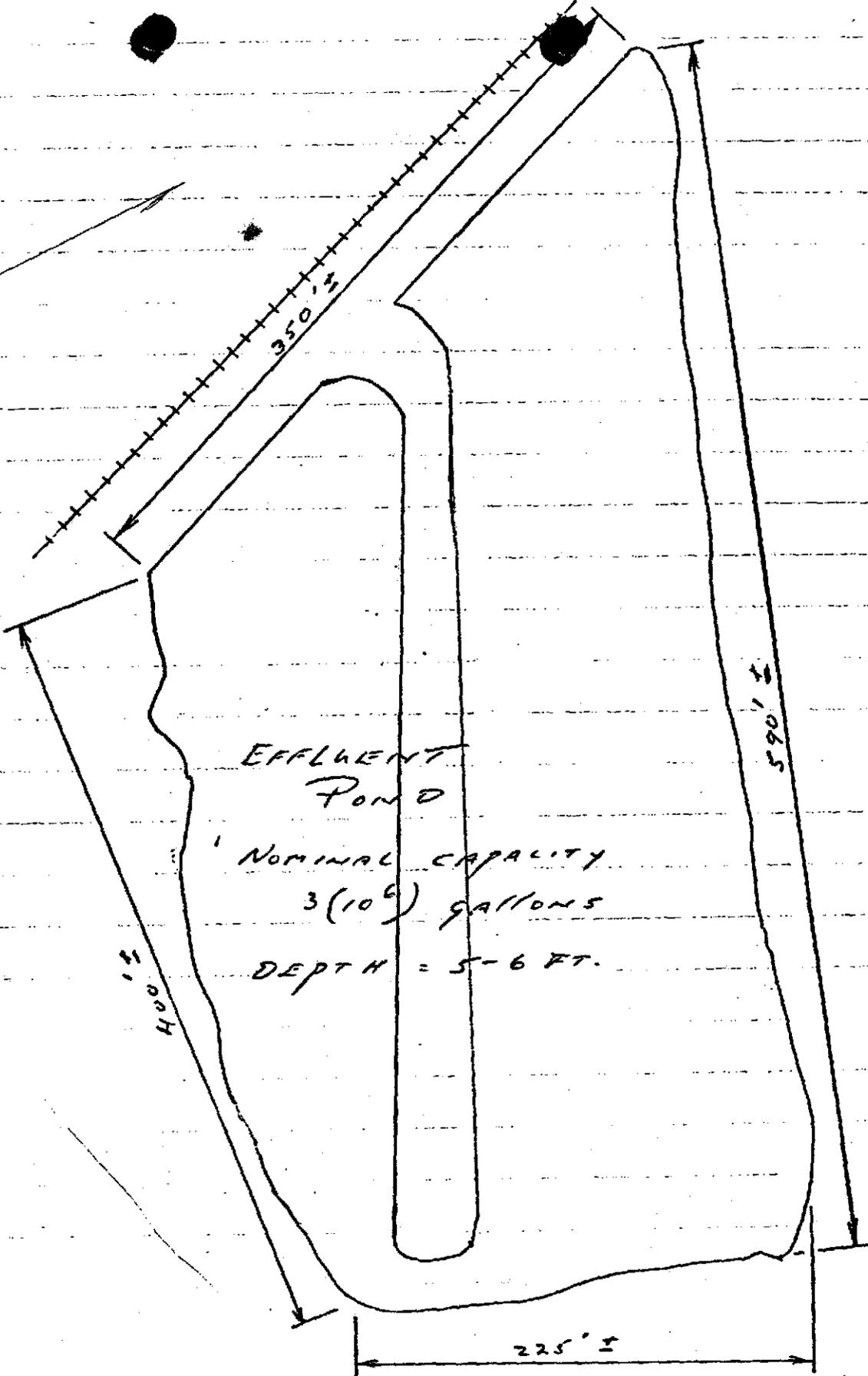
A sketch of the area is attached. The above could be accomplished at an approximate cost of \$3.00 per year of dirt moved, with 10,000 yards needed. Additionally, we would continue groundwater monitoring for a period of 30 years post closure, utilizing the four (4) groundwater monitoring wells now in place, at a cost of approximately \$2,000.00 per year. Groundcover remedial maintenance would cost an additional \$500.00 per year. Hence, total costs are estimated at 10,000 (\$3) + 30 (\$2,500) = \$105,000.

Very truly yours,

Richard D. Karkkainen
Director of Environment & Safety

CC: Mr. F. Ahlers
Mr. R. Guidi
Mr. R. Maraman

RDK:ew
Attachment



EFFLUENT
POND

NOMINAL CAPACITY
3(10⁶) GALLONS

DEPTH = 5-6 FT.

350' ±

400' ±

590' ±

225' ±

HILL
AREA

22



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

REPLY TO: P. O. BOX 3
VICKSBURG, MS 39180
(601) 636-1231

August 11, 1981

Mississippi Department of Natural Resources
Bureau of Pollution Control
Solid Waste Division
Post Office Box 1700
Jackson, Mississippi 39209

Attention: Mr. David Lee

SUBJECT: CLOSURE PLAN, CONTINGENCY PLAN, AND WASTE FACILITY TRAINING PROGRAM

Enclosed is a copy of the above plan per my letter of July 29, 1981.

Please advise if you need additional information.

Sincerely,

R. F. Maraman
R. F. Maraman

RFM/djw

Enclosure

cc: D. Madsen
D. Karkkainen, Memphis
File

RECEIVED

AUG 12 '81

DIV. 1 & 2 & 3

Om



VERTAC CHEMICAL CORPORATION

24th Floor • 5100 Poplar • Memphis, TN 38137 • 901-767-6851

REPLY TO: P. O. BOX 3
VICKSBURG, MS 39180
(601) 636-1231

July 29, 1981

Mississippi Department of Natural Resources
Bureau of Pollution Control
Solid Waste Division
Post Office Box 1700
Jackson, Mississippi 39209

Attention: Mr. David Lee

SUBJECT: CLOSURE PLAN, CONTINGENCY PLAN, AND WASTE FACILITY TRAINING PROGRAM

Re your visit of July 27, 1981, the above plans are in our Memphis office.

They will send me copies and when they arrive, I will send you a copy for your review.

Sincerely,

R. F. Maraman
R. F. Maraman
Chief Chemist

RFM/djw

cc: File

RECEIVED

JUL 31 '81

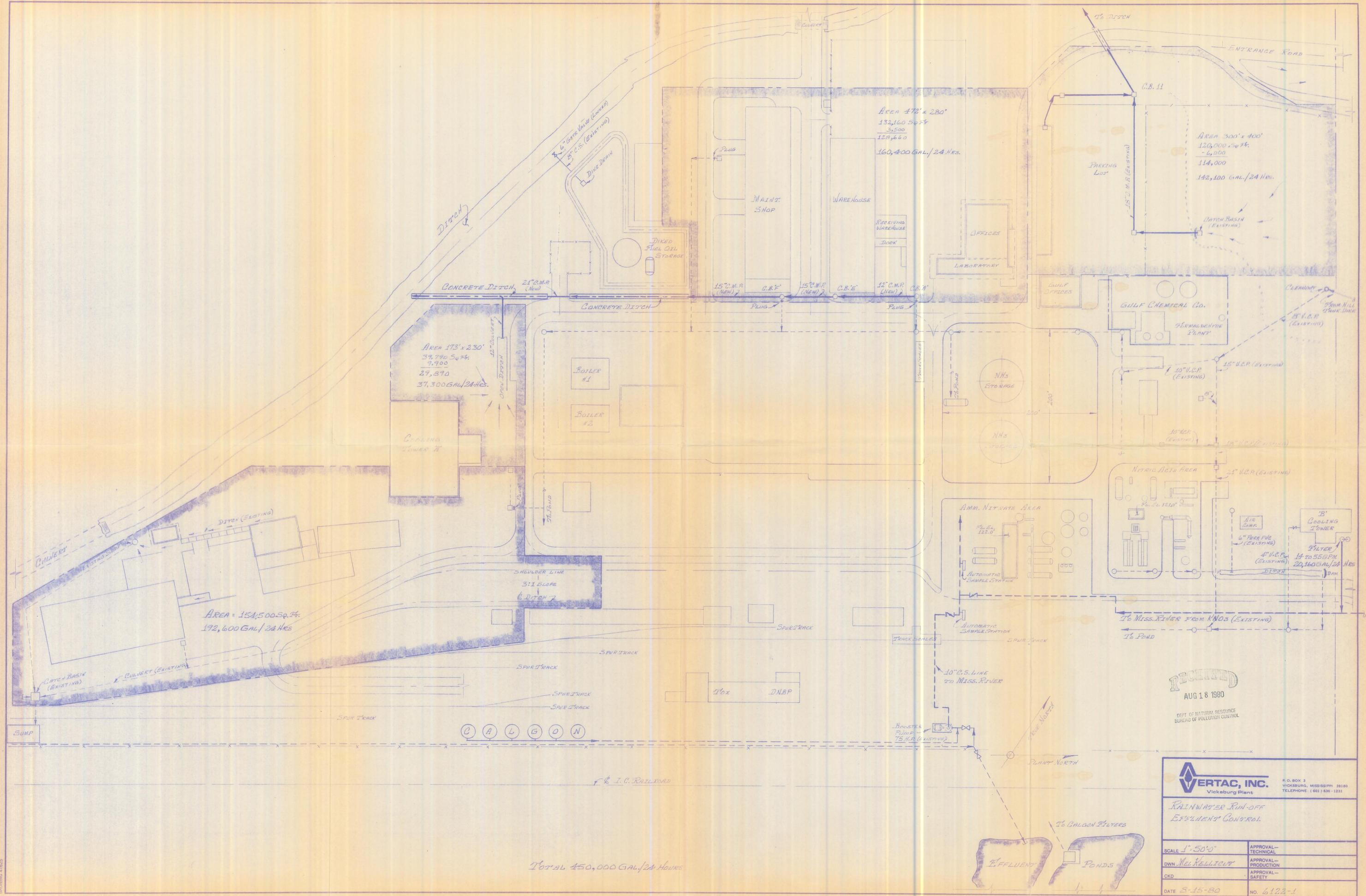
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01

UNIVERSITY OF MISSISSIPPI

1981



RECORDED
 AUG 18 1980
 DEPT. OF NATURAL RESOURCE
 BUREAU OF POLLUTION CONTROL

VERTAC, INC.
 Vicksburg Plant
 P.O. BOX 3
 VICKSBURG, MISSISSIPPI 39180
 TELEPHONE: (601) 636-1231

**RAINWATER RUN-OFF
 EFFLUENT CONTROL**

SCALE 1"=50'0"	APPROVAL- TECHNICAL
DWN MEL KELLICOTT	APPROVAL- PRODUCTION
CKD	APPROVAL- SAFETY
DATE 3-15-80	NO. 6122-1

BRUNING 11825