GW - 32

6/96

INSPECTIONS & DATA

GIANT REFINING CO.

June 24, 1996

Route 3, Box 7
Gallup, New Mexico
87301

505
722-3833

Mr. Patricio W. Sanchez
Petroleum Engineer
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Dear Mr. Sanchez:

SUBJECT: RESPONSE TO NMOCD'S GW-32 PERMIT RENEWAL INSPECTION DATED DECEMBER, 1995.

As per our telephone conservation of June 19, 1996, concerning the captioned subject, attached you will find one original and one copy of Giant Refining Company's "Response to NMOCD'S GW-32 Permit Renewal Inspection Dated December, 1995". In addition, Giant has forwarded one copy of the attached document to Mr. Denny Foust in Aztec.

If, after reviewing the attached, you have any questions or concerns, please immediately contact me at (505)722-0227.

Sincerely,

Edward L. Horst, Environmental Manager
Giant Refining Company
Ciniza Refinery

cc: Dick Platt, General Manager, Giant Refining Company
David Pavlich, HSE Manager, Giant Refining Company
Steve Morris, Environmental Specialist, Giant Refining Company
Kim Bullerdick, Legal, Giant Industries of Arizona

RESPONSE TO NMOCD'S GW-32 PERMIT RENEWAL INSPECTION DATED DECEMBER, 1995

GIANT REFINING COMPANY CINIZA REFINERY

JUNE 24, 1996

by: Edward L. Horst
Environmental Manager

1. API Separator area - including Benzene stripper. (Photos: 1-6)

OCD Comment:

The soil in this immediate area needs to be cleaned up, there were several patches of ground that showed visible contamination.

Giant's Response:

A work order to perform cleanup has been submitted and work has begun. It should be noted that this area, due to the nature of the operation, is subject to periodic spills which are promptly addressed. Regular inspections will assist Giant in identifying and correcting problem areas. Regular inspections will be in written form and placed in the facility records. All contaminated soils is and will continue to be remediated in place or placed on the OCD Land Treatment Unit in accordance with our Ground Water Discharge (GW-32) Permit.

OCD Comment:

The API Separator itself may be lacking in integrity-see the seam in photo No. 5. If the API Separator is going to remain in use as a sludge trap as part of the approved waste water modification (dated March 15, 1995 from OCD), it will have to be cleaned and inspected yearly by Giant to verify integrity as this is a below grade area. *Note: Giant shall document the yearly inspections and keep a record of these inspections at the facility.* Further some method of covering the API should be proposed.

Giant's Response:

Plans to repair or replace the API Separator are underway. Due to some engineering concerns on this project, Giant has authorized additional engineering evaluations to be performed. In addition, Giant, in December 1995, removed all materials from the API Separator and physically inspected the containment unit. Any identified, potential integrity problems were corrected at that time. Giant will keep OCD informed as to the progress of this project.

OCD Comment:

The benzene stripper was carrying over at the time of the inspection and exhausting a mist to the atmosphere - see photo 6, right-hand stripping tower. This type of upset condition needs to be minimized. Also note in the same photo the free liquid that is on the ground near the inlet line to the Benzene stripper-these types of leaks need to be eliminated.

Giant's Response:

To resolve this issue, Giant has submitted a request for funds to replace the existing Benzene Stripper Towers with larger towers. This will allow for more packing to be added, thus increasing the efficiency of the stripping process and reducing carry-over. Cost estimates have been received and design measurements are now being taken and submitted to Technical Services for approval. It is anticipated that the new towers will be in place and functioning by the fourth quarter of 1996.

OCD Comment:

See photo 39 - These tanks were in temporary use by Giant at the time of the inspection. Giant did have a plastic liner underneath the tanks and is a good practice and should be continued each time that Giant uses temporary tanks to store API separator contents. However, Giant should also use a temporary earthen berm to contain 1 1/3 times the tank volume.

Giant's Response:

Giant's policy is to continue using appropriate containment measures for both temporary and permanent tankage. The tanks shown in photo 39 are no longer on site. They were removed shortly after OCD visited the refinery.

2. Aeration Lagoon area - photos No. 8.

OCD Comment:

During the inspection there appeared to be some sort of floating product on the aeration lagoons as well as a sludge on the rocks containing the lagoons-see photo 8. This floating scum may have been due to the lack of aeration pumps in operation-i.e. at the time of the inspection one of the pumps was down. Giant needs to maintain the condition of the lagoons-perhaps when the new waste water treatment system begins operation many of these problems will be eliminated.

Giant's Response:

Aeration lagoons are visually inspected on a regular basis. Any oils that are seen floating on the surface of the ponds are reported immediately and steps to correct this problem are taken. At present, four (4) aeration pumps are operational. Work orders have been submitted to maintenance to repair the fifth aeration pump. Floating/BOOM types of materials will be made available in the event floating product appears. These materials will be used in conjunction with Giant's vacuum truck for product capture and removal. Removed liquids will be re-introduced into the API Separator for recovery.

3. Solar evaporation ponds area.

OCD Comment:

The next item on the inspection was the solar evaporation ponds. The observations that follow will address the specific issues of concern to the OCD.

A. The use of the temporary evaporation ponds will cease immediately - as was stated verbally by the OCD during the inspection.

Giant's Response:

The use of the temporary evaporation ponds has ceased. Regular inspections are conducted and plans are being formulated to pump residual water out and place it into adjacent lagoons. Plans are underway to contract with an earth moving company to have the dikes removed and area leveled to allow a natural surface water run-off to occur. Estimated time of completion will be in the fourth quarter of 1996. It should be noted that all valves leading into the temporary ponds have been either removed or blinds have been installed and valve handles removed.

OCD Comment:

B. The metal posts that surround the ponds are not part of the OCD requirements for this facility upon review of the OCD file for GW-32.

Note: Giant needs to research their own records to verify this point and find out what the exact purpose of these metal posts is/was? If the posts serve no permit need of the OCD or other regulatory agency, as was requested by Mr. Shelton with Giant the metal posts should be removed. OCD agrees with this proposal but would require Giant to fill the holes with bentonite plug to prevent the post holes from becoming conduits to the subsurface.

Giant's Response:

A review of historical records shows that these pipes were used as dike leak detection devices. No reports have been found to describe how the pipes were placed or their success in detecting dike leaks. Giant plans to remove the pipes or cut them off at ground level and back fill any remaining openings with appropriate plugging material (bentonite gel or concrete). It is anticipated that this work will be completed by the end of 1997.

4. NMOCD Land Farm. (See photo number 10)

OCD Comment:

At the time of the inspection free liquids and other items such as rubber gloves and shop floor sweep were present in the land farm area.

- Free liquids are not allowed on the land farm facility permitted by NMOCD.

Giant's Response:

Regular inspections of the Land Treatment Area are presently being conducted. Inspections, along with Giant's new program requiring all oil contaminated soil going to the Land Treatment Area to receive a "permit" from the Environmental Department prior to disposing, are helping to minimize improper disposal activities. Attached is a copy of the "permit" form currently being utilized.

OCD Comment:

Only non-hazardous and RCRA Subtitle C exempt materials are under NMOCD jurisdiction - therefore some means of assuring that only non-hazardous or RCRA Subtitle C exempt materials are placed on the NMOCD permitted land farm. Mr. Foust with the NMOCD Aztec District office did provide Giant Ciniza with some example forms for tracking the wastes to be remediated at the NMOCD permitted land farm. Mr. Shelton proposed some sort of log book to be utilized - it is the OCD Santa Fe office opinion that a form C-138 be utilized for non-exempt-non-hazardous materials and the log book be utilized for the RCRA subtitle C exempt soils. (See closure number 1 - form C-138).

Giant's Response:

Giant is now using form C-138 along with the "permit" process described above. Attached is a copy of form C-138.

OCD Comment:

The disking frequency that was part of the NMOCD land farm approval was requested by Giant to be modified. Giant should address what disking frequency would be more workable in order to optimize the Bioremediation process.

Giant's Response:

At present, disking will be performed in accordance with the Ground Water Discharge Permit (GW-32) issued by NMOCD. Because a local farmer has been contracted to perform disking activities and is not always available, Giant has been contacting farm equipment companies for the purpose of obtaining cost estimates for purchasing the necessary equipment.

In reviewing the disking requirements set forth in Giant's Ground Water Discharge Permit and the availability of equipment, Giant is requesting to modify the disking frequency from the current 72 hours after application to the following:

1. ***5 cubic yards or more of petroleum contaminated soils 72 hours.***
2. ***5 cubic yards or less of petroleum contaminated soils 120 hours.***

OCD Comment:

Also of concern was the site security of the NMOCD land farm - Mr. Pavlich suggested gates be put on the berms. Giant should also consider the idea of fencing the entire land farm area as well. Perhaps better tracking as discussed above would prevent non-compliance issues such as shown in photo no. 8 from occurring. Giant needs to address how the security of the NMOCD land farm will be addressed. Giant should require that all wastes placed on the NMOCD land farm be under the direct control on the Giant Ciniza Health, Safety, and Environment office.

Giant's Response:

As discussed above, regular inspections of the NMOCD land farm are being conducted; and any activity that is in conflict with Giant's policy is reported to the appropriate department. At the entry points of the landfill (Northeast corner and Southeast corner), steel posts have been placed on each side of the entry points and a chain with sign has been placed across the points of entry. As described above, Giant has implemented a "permit" policy. Permits are issued by the Environmental Department.

OCD Comment:

Treatment zone monitoring as attached as part of the NMOCD discharge plan modification - the OCD Santa Fe office has not received any of the sampling/monitoring as required in the discharge plan GW-032 modification approval dated June 14, 1995. (See enclosure no. 2 - approval letter from NMOCD dated June 14, 1995.)

Giant's Response:

In reviewing Giant's files, it was discovered that with the recent changes of personnel, we had inadvertently overlooked this requirement. Samples have been taken and analytical results are presented in the attached report identified as "1996 OCD Soil Sampling Event". Please note that OCD required only one sample to be taken. Giant took four randomly selected samples as well as one surface composite sample from 8 different locations.

5. Western tank area - photos number 11-19.

A. Empty drum area.

OCD Comment:

This area needs immediate attention - drums need to be stored properly: i.e. bungs in place, with the drums on their side, and bungs horizontal to the ground.

Giant's Response:

Work orders have been submitted to the appropriate department to perform this work. Drums have been gathered up and removed to the North Drum Storage Area for crushing. The Environmental Department, in cooperation with the Laboratory and Maintenance Departments, will develop written procedures on how to properly store drums in this area. It is anticipated that the written procedures will be completed and distributed by the end of the third quarter of 1996. To assist in addressing those concerns, regular inspections will be conducted, and any items of concern will be immediately brought to the attention of the responsible department.

OCD Comment:

Note, at the time of the inspection many of the drums were partially full and the contents of many of them were unknown. Giant needs to make certain that "empty" drums are in fact empty, and those that contain usable products are stored separately on pad and curb type containment and with proper labels.

Giant's Response:

As a part of the written procedures described above, a section will be included stating that only "empty" drums will be allowed to be stored at this location. Any drum containing product will be handled and stored separately with secondary containment.

OCD Comment:

Sump near the empty drum area needs to be cleaned annually and inspected for integrity. (see photo no. 11) Giant needs to document this sump inspection in the facility records.

Giant's Response:

Giant is conducting regularly scheduled inspections using maps and checklists. Areas showing signs of contamination are identified and responsible departments are notified. Documentation of inspections are placed in facility records. The area around the sump has been cleaned, soil excavated, and forms are being constructed so that a large cement pad can be installed. This work should be complete by the end of June, 1996. Mechanical integrity protocols are presently in draft form. Reviews and revisions are being conducted and completion is expected to be in the second quarter of 1997. Copies will be maintained at the facility.

B. Tank 102/101 area.

OCD Comment:

Pumps - several centrifugal type transfer pumps are in need of better housekeeping practices. (See photo no. 13). 5 gallon buckets shall not be allowed to overflow due to pump priming operations or wind blowing the buckets off of the pump.

Giant's Response:

A list is presently being compiled identifying all transfer pumps needing better housekeeping practices and those needing to have containment designs changed. Once this list has been completed, work orders will be sent out to the Maintenance Department to correct any problems. Several pumps throughout the facility have already had secondary contaminant placed beneath and around them. Work on this project will continue and is anticipated to be completed during the second quarter of 1997. In the interim, regularly scheduled inspections will be conducted. Any areas not conforming with Giant's policies and procedures will be noted and responsible departments notified for corrective action. In cases of small spills, Giant will remediate in place (in situ) versus

removal to the permitted Land Treatment Unit. Procedures to handle large spills will be in accordance with Giant's Ground Water Permit (GW-32) and Contingency Plan.

OCD Comment:

Water draws need to be cleaned and inspected at least yearly and documented by Giant Ciniza. (See photo no. 14).

Giant's Response:

As stated above, Giant is conducting regular inspections using maps and checklists. Areas showing signs of contamination or other problems (such as plugged drains on the water draws) are identified and responsible departments are notified. Copies of same are placed in facility records. In cases of small spills, Giant will remediate in place (in situ) versus removal to the permitted Land Treatment Unit. Mechanical integrity protocols are presently in draft form. Reviews and revisions are being conducted and completion is expected to be in the second quarter of 1997. Copies will be maintained at the facility.

OCD Comment:

No. 1 diesel tank appears to be leaking - Giant needs to propose an inspection plan for this tank in order to confirm mechanical integrity. (See photo no. 16).

Giant's Response:

Mechanical integrity protocols are presently in draft form. Reviews and revisions are being conducted and its completion is expected to be in the second quarter of 1997. Copies will be maintained at the facility. Regular inspections of the No. 1 Diesel Tank since the OCD's inspection and discussions with tank field personnel indicated that the material observed during the inspection was the result of repair and maintenance activities at the tank. There has been no subsequent evidence of leakage at this tank.

C. Additive section.

OCD Comment:

Texaco, Amoco, and Giant need to address secondary containment and pad and curb options for their respective additive areas.

Giant's Response:

Texaco and Amoco as well as Giant's finished product dispatching personnel have been notified of the need to address this issue. Plans are underway to begin constructing secondary containment around those Additive Tanks identified above. Projected time of completion is the 2nd quarter of 1997. In the mean time, regular inspections are being performed and documented. All leaks and spills will be reported to the responsible department for cleanup.

D. Loading rack area.

OCD Comment:

Long-Horizontal sumps in the loading rack area need to be cleaned and inspected yearly and Giant must document the inspection and keep a file at the facility.

Giant's Response:

Mechanical integrity protocols are presently in draft form. Reviews and revisions are being conducted and completion is expected to be in the second quarter of 1997. Copies will be maintained at the facility.

Giant also needs to propose and schedule a mechanical integrity test for the below grade piping in this area and all other OCD regulated below ground effluent, product, and waste water lines.

Giant's Response:

Third party contractors have been contacted to provide recommendations and cost estimates for testing of below ground lines. Giant is also attempting to develop in-house testing capabilities. Mechanical integrity protocols are presently in draft form. Reviews and revisions are being conducted and its completion is expected to be in the second quarter of 1997. Copies will be maintained at the facility.

E. Carpenters shop area.

OCD Comment:

Many cans/5 Gallon buckets partially full are discarded throughout this area-this situation needs to be addressed and housekeeping practices put in place to ensure proper disposal of empty paint and solvent cans and proper storage of partially used containers. (See photo no. 17 and 18).

Giant's Response:

All cans/5 gallon buckets have been removed and regularly scheduled inspections of the area, to insure this practice is discontinued, are being conducted and recorded. Any non-conforming activities will be immediately brought to the attention of the responsible department for corrective action.

OCD Comment:

Benzene air stripper cleaning pad area needs better housekeeping. (See photo no. 19 and note the concrete trench in from of this area).

Giant's Response:

Regular inspections are being conducted at this area and recorded. Any non-conforming activities are brought to the attention of the responsible department for corrective action.

II. October 5, 1995 - Lab, South east tank area, Plant process area, and Railroad loading area.

1. Lab area

OCD Comment:

Lab wastes streams need to be characterized and stored/disposed of according to waste profile in terms of hazardous and/or non-hazardous characteristics.

Giant's Response:

Because of the recent audit conducted by OCD, Giant has reviewed the chemicals used on site. As a result, some of the chemicals identified as potentially hazardous waste (as defined in 40 CFR 261) have been replaced with non-hazardous waste types of chemicals. An example of this is the suspension of the use of acetone. Acetone has been replaced with a light petroleum intermediate which is recycled through the API Separator.

OCD Comment:

A written plan for lab employees to follow in terms of spill procedures and clean-up procedures should be prepared by Giant Ciniza.

Giant's Response:

Giant has prepared a written plan for lab employees to follow. Currently the "Oil Spill Prevention Plan and Emerency Response Action Plan" is being revised to reflect staff changes. Once revision have been completed Giant will send a copy of the revised plan to OCD. Revisions and review by management are expected to be complete by the end of the third quarter 1996.

Mr. Pavlich proposed to eliminate many of the chemicals present in the lab area that are not needed. Giant should provide the OCD a list of chemicals that will remain in use.

Giant's Response:

Giant has donated several unused chemicals to a local university. Contacts are now being made with another university and local high schools to see if they are interested in obtaining any of the remaining chemicals. Remaining chemicals not wanted by those institutions will be disposed of in accordance with the applicable regulations. A list of the laboratory chemicals currently in use at this facility is attached.

OCD Comment:

On January 16, 1996 Mr. Ed Horst Faxed the OCD a section of the 40 CFR 263.3 that discuss' exemptions from Hazardous waste regulations for certain lab facilities - Giant should

follow up on this information and how it does or does not relate to this facilities lab waste stream.

Giant's Response:

Work on this is continuing, however some substitutions have been made in the use of chemicals. Acetone has been replaced with light petroleum intermediate which in turn is recovered through the API Separator. Attached is a list of chemicals presently being used at the laboratory.

OCD Comment:

Several tanks and sample areas outside of the lab do not meet the OCD guidelines for secondary containment and pad curb type containment. (See photos no. 20, 21 and 22).

Giant's Response:

Laboratory personnel, in cooperation with the Environmental Department personnel, are presently identifying what types of secondary containment are necessary. Secondary containment is expected to be in place by the end of the second quarter of 1997. All the secondary containment projects identified in the document are a part of a much larger, on-going paving and containment improvement project presently being planned for the facility.

2. South east tank area

OCD Comment:

Many of the general housekeeping concerns apply to this area - see photo no. 24 and 25. i.e. sumps/drip pans need to be maintained and inspected in order to prevent overtopping, pipe areas need to maintain as far as spill clean-ups.

Note: Any below grade sump that is to be replaced shall have secondary containment and leak detection as part of the design.

Giant's Response:

As a part of the Environmental Department's routine inspections, areas of contamination are noted and responsible departments advised of the need for corrective action. As required by regulations, all below grade sumps which are being replaced will be designed and constructed to include secondary containment. Mechanical integrity protocols are presently in draft form and are expected to be in place by the second quarter of 1997.

3. Plant process area

OCD Comment:

In general Giant has made headway as far as installing concrete pad/curb type containment throughout the entire process and appears to be headed toward covering the entire process area with pad/curb type containment. (See photo no. 23).

A. Caustic tanks need secondary containment. (1 1/3 volume of the tank) See photo no. 33.

Giant's Response:

Plans for a secondary containment pad for the caustic tank are under review. Giant currently plans to construct a secondary containment unit in such a manner that will allow a direct drain off of any spills from this tank into the sewer system. This will eliminate the caustic solutions from coming in contact with the ground. Completion of this project is expected to occur by the end of 1996.

OCD Comment:

B. Brine tank needs replacement and secondary containment or placement on an elevated skid with impermeable pad/curb type containment. Salt encrusted pump near brine tank needs clean up. (See photo 30, 31, and 32).

Giant's Response:

Replacement of the Brine tank is scheduled for completion by the end of 1997. Secondary containment and/or an elevated skid with impermeable pad/curb type of containment will be installed at the time of replacement. In the interim, regular inspections will continue and deficiencies will be reported to the appropriate departments for corrective actions..

4. Railroad loading area.

OCD Comment:

A. Former lead house - (See photo no. 26) - The water contained in this area should be removed, during the inspection Mr. Pavlich stated that the water could be pumped out and into the waste water treatment system.

Giant's Response:

Water has been removed and the floor pit has been filled in and covered with concrete. Currently, the old lead house is being used for storage.

OCD Comment:

B. Pipe runs in this area showed evidence of spills and needs to be cleaned up - see photo no. 27.

Giant's Response:

As a part of the Environmental Department's regularly scheduled check list, areas of contamination will be noted. Notification of the need for corrective action will be sent to the responsible departments with a memo requesting corrective action. Methods for remediation will consist of the removal of soils from large spills and placing the petroleum contaminated soils in the Permitted Land Treatment Unit. Small spills will be remediated in place (in situ) using biological methods.

OCD Comment:

C. Old railrack lagoon - see photo no. 28.

A question of regulatory authority at this site needs to be addressed by Giant, OCD, and EPA/NMED so that the impoundment may be closed and cleaned up. A first step to this is to verify if in fact the waste that was put into the lagoon is non-hazardous or exempt-then it would appear to fall under OCD, if Hazardous it would probably fall under EPA/NMED. Giant should bring this point up with the other agencies as well as OCD so that this issue may be resolved and the lagoon closed properly so that it is protective of human health, safety, and the environment.

Giant's Response:

Giant has an approved Corrective Action Plan from EPA-Region VI. Copies are being furnished to NMED since they have been authorized by the EPA to enforce regulations associated with Corrective Actions. Attached is a copy of EPA's January 7, 1994 approval letter.

III. October 6, 1995 - Plant and shop/warehouse area, North tank farm, Truck stop.

1. Plant and shop/warehouse area

OCD Comment:

The general housekeeping in this area needs to be addressed - see photo no. 34 and 35. As can be seen in these photographs spills are present throughout the area and are in need of clean-up. Also, note the drums in photo no. 34 and the oil/water mixture between buildings in photographs no. 35.

Giant's Response:

This area has been cleaned up and is now included as a part of the Environmental Department's regular inspections.

2. North tank farm - photos no. 36 through no. 43

OCD Comment:

Piperuns and pump areas throughout this area in need of clean-up. It should also be noted that Giant has taken steps to put pad/curb type containment under many of the pumps and has cleaned under many of the piperuns-OCD understands this is an ongoing process of renovation-Giant should therefore propose a plan and time line for installing pad/curb for all pumps and a spill clean up plan to address the current spills/leaks currently on the ground in this area. The plan should address on site/or off site disposal options or site specific in situ remedial options.

Giant's Response:

Cleanup of these areas is presently being done. It is anticipated, that by the end of October, 1996, all areas identified by OCD as needing cleanup should be completed. Also, as stated above, Giant is conducting regular inspections using checklists. Areas showing signs of contamination are identified, responsible departments are notified, and corrective actions taken.

Secondary containment units for the pumps are being addressed; and it is anticipated that secondary containment units will be installed by the end of the second quarter of 1997. In situ corrective action will typically be used on small spills throughout the facility. Petroleum contaminated soils not undergoing in situ remediation will be removed and placed within the OCD Permitted Landfarm.

OCD Comment:

North empty drum areas - photo no. 39 and no. 40, Giant should look at the option of consolidating these empty drum areas with the empty drum area in the *Western Tank Area*. Provide the OCD with a description of the disposal of the empty drums.

Note: It is OCD's policy that all empty drums be stored on their side with the bungs in place and horizontal to the ground level.

Giant's Response:

Plans to consolidate the drum storage areas are being considered. Regular inspections are being conducted in this area. Any non-conforming conditions found are reported to the responsible department for corrective action. Giant is presently reviewing option to purchase, lease or contract for a drum crusher. Giant feels that setting up a regularly scheduled (monthly, quarterly, semi-annually or annually) crushing operation would substantially alleviate this problem. Giant's purchasing department has made significant progress recently in working with suppliers to either return emptied drums or to avoid drum handling entirely by obtaining chemicals in bulk containers.

OCD Comment:

Tank area in general - spills/leaks need to be cleaned up, berms for the most part appear to be in compliance. See photo no. 37, 38 and no. 42.

Giant's Response:

As stated above, Giant is conducting regular inspections. Areas showing signs of contamination are identified and responsible department are notified. Cleanup of all currently identified contaminated areas has begun and is expected to be completed by the end of August, 1996. Keeping in mind that, due to the nature of the refining business, spills and leaks will occur from time to time, the on-going inspection program has become an important tool in promptly identifying and correcting situations that may result or have resulted in spills or leaks.

3. Truck stop

OCD Comment:

In the fueling area all below grade sumps need to be cleaned and inspected annually and recorded at the facility by Giant Ciniza.

Giant Ciniza also needs to propose a mechanical integrity test for the underground piping from the Truck Stop to the Refinery waste water treatment system.

Giant's Response:

All below grade sumps are and will continue to be inspected on a regular basis. The buildup of dirt or other foreign materials will be removed and disposed of in accordance with applicable regulations. . Giant is presently obtaining cost estimates, from outside contractors, to perform an annual mechanical integrity testing of the sewer system. Visual inspection of soils will be made on a regularly bases for the pipe line between the Truck Stop and the Refinery.

OCD Comment:

Giant Ciniza also needs to propose a mechanical integrity test for the underground piping from the Truck Stop to the Refinery waste water treatment system.

Giant's Response:

A monthly inspection checklist will be followed in inspecting and insuring proper operation of holding tanks, lines and lift stations. Giant is presently obtaining cost estimates, from outside contractors, to perform an annual mechanical integrity testing of the sewer system. Visual inspection of soils will be made on a regularly bases for the pipe line between the Truck Stop and the Refinery. Copies of inspections will be maintained on site.

IV. Other issues to be considered as part of the renewal.

1. Tank 569 Characterization Plan - see Enclosure no. 3.

OCD Comment:

On June 14, 1995 the OCD approved of the "Tank 569 Characterization Plan" with certain conditions of approval. Upon verbal discussion with Mr. Pavlich and Mr. Shelton with Giant Ciniza the OCD will allow Giant to Amend the Approval dated June 14, 1995 to address point condition No. 2. It is now the position of OCD that Giant should first delineate the contamination and log the geologic sections in the investigation well bores in order to determine the optimal clean-up/remediation strategy.

Note: The uncased investigatory well bores must be plugged with a bentonite/cement type grout. Also the State Engineers office and the land owner must be notified prior to drilling any wells.

Giant's Response:

On April 15, 1996, Giant Refining Company submitted to OCD and NMED a Corrective Action Plan outlining initial steps to be taken for the cleanup of this site. On May 8, 1996, OCD responded to Giant's submittal and instructed Giant to begin product recovery no later than July 1, 1996. A purchase order has been placed for two pumps to be purchased and placed into service as prescribed in Giant's Corrective Action Plan.

2. Discharge Plan Sampling and monitoring requirements.

OCD Comment:

Giant should re-evaluate the current sampling frequency and requirements and propose a revision to the current sampling/monitoring conditions based on current data trends and cost effectiveness while considering risk to the environment and human Health and Safety.

Giant's Response:

Giant is reviewing all the required sampling events specified by the various regulatory agencies. At present, Giant will continue to sample and monitor as directed by its Ground Water Discharge Plan (GW-32). Giant, may, in the future, submit a permit modification request for changing sampling and monitoring events.

3. Rail Spur Addition.

OCD Comment:

If Giant is proposing to add a rail spur or any other modifications they should be included in this renewal so as to save time and money for both the OCD and Giant.

Giant's Response:

At the present time, plans for the addition of the rail spur are uncertain. Once the decision has been made to add the rail spur, Giant will submit a permit modification to OCD.

It should be noted that from time to time, refinery operations are modified. This, in turn, will cause inspection checklists to be modified. The attached copies of inspection sheets are not

intended to become a part of the permit, but meant instead to show the level of effort with which Giant is proceeding to identify and correct any problem that are found.

OCD - LAND TREATMENT AREA USAGE PERMIT

PERMIT NUMBER: _____

1. This permit has been issued to _____ on _____
   Name Date

2. _____ Environmental Department authorization.
   Signature

3. _____ Weight ticket has been attached to this permit.
   Initial

4. _____ This load has been checked and is free of unauthorized materials, such as
   Initial plastic, gloves, wood and hazardous waste.

5. _____ This load does not contain free liquids.
   Initial

6. _____ This load has been mixed with the land farm soil and leveled so as not to
   Initial exceed 6 inches in thickness.

NOTE: * ***Item number two (2) must be signed by a member of the Environmental Department PRIOR to the placement of any material.***

** ***All other items must be initialed by the individual placing the material in the OCD Land Treatment Area.***

AFTER MATERIAL HAS BEEN PLACED IN THE LAND TREATMENT AREA, THIS COMPLETED PERMIT MUST BE RETURNED TO THE ENVIRONMENTAL DEPARTMENT FOR FILING.

District I - (505) 393-6161
P. O. Box 1940
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-138
Originated 4/18/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☐ Non-Exempt: ☐	4. Generator
Verbal Approval Received: Yes ☐ No ☐	5. Originating Site
2. Management Facility Destination	6. Transporter
3. Address of Facility Operator	8. State
7. Location of Material (Street Address or ULSTR)	

9. Circle One:

A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.

B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved.

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:

Estimated Volume _____ cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: _____ TITLE: _____ DATE: _____
Waste Management FacilityAuthorized Agent

TYPE OR PRINT NAME: _____ TELEPHONE NO. _____

(This space for State Use)

APPROVED BY: _____ TITLE: _____ DATE: _____

APPROVED BY: _____ TITLE: _____ DATE: _____

1996 OCD SOIL SAMPLING EVENT

OCD PERMITTED LANDFARM

GAINT REFINING COMPANY
CINIZA REFINERY

Inter-Mountain
Laboratories, Inc.

2506 West Main Street
Farmington, New Mexico 87401
Tel. (505) 326-4737

16 May 1996

Ed Horst
Giant Refining Co.
Rt. 3 Box 7
Gallup, NM 87301

Mr. Horst:

Enclosed please find the report for the samples received by our laboratory for analysis on April 18, 1996.

If you have any questions about the results of these analyses, please don't hesitate to call me at your convenience.

Sincerely,

Anna Schaerer

Anna Schaerer
Organic Analyst/IML-Farmington

Enclosure

xc: File

Inter-Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

TRACE METAL CONCENTRATION

Client:	**Giant Refining Co.**		
Project:	OCD-Land Farm Soil Test	Date Reported:	05/16/96
Sample ID:	OCD-25-41696	Date Sampled:	04/16/96
Laboratory ID:	0396G00647	Date Received:	04/18/96
Sample Matrix:	Soil	Date Analyzed:	04/24-30/96

Parameter	Result	Detection Limit	Units
Arsenic.....	<2.5	2.5	mg/kg
Barium.....	50.5	0.5	mg/kg
Cadmium.....	ND	0.2	mg/kg
Chromium.....	25.0	0.5	mg/kg
Lead.....	3.5	2.5	mg/kg
Mercury.....	ND	0.2	mg/kg
Selenium.....	ND	2.5	mg/kg
Silver.....	ND	0.5	mg/kg

References:

"Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", SW-846, United States Environmental Protection Agency, November, 1986.

Method 3030 : Acid Digestion of Oils, Greases, Or Waxes.

Reported By: _____ Reviewed: _____

Inter·Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

TRACE METAL CONCENTRATION

Client: **Giant Refining Co.**
Project: OCD-Land Farm Soil Test
Sample ID: OCD-70-41696
Laboratory ID: 0396G00648
Sample Matrix: Soil

Date Reported: 05/16/96
Date Sampled: 04/16/96
Date Received: 04/18/96
Date Analyzed: 04/24-30/96

Parameter	Result	Detection Limit	Units
Arsenic	2.5	2.5	mg/kg
Barium	34.4	0.5	mg/kg
Cadmium	ND	0.2	mg/kg
Chromium	24.0	0.5	mg/kg
Lead	8.45	2.5	mg/kg
Mercury	ND	0.2	mg/kg
Selenium	ND	2.5	mg/kg
Silver	ND	0.5	mg/kg

References:

"Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", SW-846, United States Environmental Protection Agency, November, 1986.

Method 3030 : Acid Digestion of Oils, Greases, Or Waxes.

Reported By: _____ Reviewed: _____

Inter-Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

TRACE METAL CONCENTRATION

Client:	**Giant Refining Co.**		
Project:	OCD-Land Farm Soil Test	Date Reported:	05/16/96
Sample ID:	OCD-77-41696	Date Sampled:	04/16/96
Laboratory ID:	0396G00649	Date Received:	04/18/96
Sample Matrix:	Soil	Date Analyzed:	04/24-30/96

Parameter	Result	Detection Limit	Units
Arsenic.....	<2.5	2.5	mg/kg
Barium.....	15.6	0.5	mg/kg
Cadmium.....	ND	0.2	mg/kg
Chromium.....	30.7	0.5	mg/kg
Lead.....	1.93	2.5	mg/kg
Mercury.....	ND	0.2	mg/kg
Selenium.....	ND	2.5	mg/kg
Silver.....	ND	0.5	mg/kg

References:

"Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", SW-846, United States Environmental Protection Agency, November, 1986.

Method 3030 : Acid Digestion of Oils, Greases, Or Waxes.

Reported By: _____ Reviewed: _____

Inter-Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

TRACE METAL CONCENTRATION

Client:	**Giant Refining Co.**		
Project:	OCD-Land Farm Soil Test	Date Reported:	05/16/96
Sample ID:	OCD-Center-41696	Date Sampled:	04/16/96
Laboratory ID:	0396G00650	Date Received:	04/18/96
Sample Matrix:	Soil	Date Analyzed:	04/24-30/96

Parameter	Result	Detection Limit	Units
Arsenic.....	<2.5	2.5	mg/kg
Barium.....	18.0	0.5	mg/kg
Cadmium.....	ND	0.2	mg/kg
Chromium.....	30.9	0.5	mg/kg
Lead.....	3.07	2.5	mg/kg
Mercury.....	ND	0.2	mg/kg
Selenium.....	ND	2.5	mg/kg
Silver.....	ND	0.5	mg/kg

References:

"Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", SW-846, United States Environmental Protection Agency, November, 1986.

Method 3030 : Acid Digestion of Oils, Greases, Or Waxes.

Reported By: _____ Reviewed: _____

Inter-Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

TRACE METAL CONCENTRATION

Client:	**Giant Refining Co.**		
Project:	OCD-Land Farm Soil Test	Date Reported:	05/16/96
Sample ID:	OCD-Composite-41696	Date Sampled:	04/16/96
Laboratory ID:	0396G00651	Date Received:	04/18/96
Sample Matrix:	Soil	Date Analyzed:	04/24-30/96

Parameter	Result	Detection Limit	Units
Arsenic.....	3.5	2.5	mg/kg
Barium.....	9.7	0.5	mg/kg
Cadmium.....	ND	0.2	mg/kg
Chromium.....	18.6	0.5	mg/kg
Lead.....	2.35	2.5	mg/kg
Mercury.....	0.71	0.2	mg/kg
Selenium.....	ND	2.5	mg/kg
Silver.....	ND	0.5	mg/kg

References:

"Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", SW-846, United States Environmental Protection Agency, November, 1986.

Method 3030 : Acid Digestion of Oils, Greases, Or Waxes.

Reported By: _____ Reviewed: _____

Inter-Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

Quality Control / Quality Assurance

Spike Analysis / Blank Analysis

TRACE METALS

Client:	**Giant Refining Co.**	Date Reported:	05/03/96
Project:	OCD-Landfarm Soil Test	Date Analyzed:	04/24-30/96
Sample Matrix:	Soil	Date Received:	04/18/96

Spike Analysis

Parameter	Spike Result (mg/L)	Sample Result (mg/L)	Spike Added (mg/L)	Percent Recovery
Arsenic	0.023	0.007	0.020	**80%**
Barium	0.48	0.03	0.50	**90%**
Cadmium	0.46	<0.004	0.50	**92%**
Chromium	0.47	<0.01	0.50	**94%**
Lead	0.47	<0.05	0.50	**95%**
Mercury	0.67	0.14	0.500	**105%**
Selenium	0.022	<0.005	0.020	**110%**
Silver	0.46	<0.01	0.50	**92%**

Method Blank Analysis

Parameter	Result	Detection Limit	Units
Arsenic	**ND**	0.25	mg/L
Barium	**ND**	0.5	mg/L
Cadmium	**ND**	0.2	mg/L
Chromium	**ND**	0.5	mg/L
Lead	**ND**	2.5	mg/L
Mercury	**ND**	0.2	mg/L
Selenium	**ND**	0.25	mg/L
Silver	**ND**	0.5	mg/L

References: "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", SW-846, United States Environmental Protection Agency, November, 1986.

Method 3030 : Acid Digestion of Oils, Greases, Or Waxes.

Reported by _____ Reviewed by _____

Inter-Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

Quality Control / Quality Assurance

Known Analysis
TRACE METALS

Client: **Giant Refining Co.**
Project: OCD-Landfarm Soil Test
Sample Matrix: Soil

Date Reported: 05/16/96
Date Analyzed: 04/24-30/96
Date Received: 04/18/96

Known Analysis

Parameter	Found Result (mg/Kg)	Known Result (mg/Kg)	Percent Recovery
Arsenic	0.009	0.010	90%
Barium	0.99	1.00	99%
Cadmium	1.04	1.00	104%
Chromium	1.05	1.00	105%
Lead	1.05	1.00	105%
Mercury	0.010	0.010	103%
Selenium	0.011	0.010	110%
Silver	0.98	1.00	98%

References:

Method 1311: Toxicity Characteristic Leaching Procedure, SW-846, Rev. 0, July 1992.

Method 3010A: Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, Rev. 1, July 1992.

Reported by _____

Reviewed by _____

Inter-Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

VOLATILE AROMATIC HYDROCARBONS

Giant

Project ID:	Soil Test OCD-Landfarm	Report Date:	05/16/96
Sample ID:	OCD-25-41696	Date Sampled:	04/16/96
Lab ID:	0396G00647	Date Received:	04/18/96
Sample Matrix:	Soil	Date Extracted:	04/24/96
Condition:	Cool/Intact	Date Analyzed:	04/29/96

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	9.8
Toluene	ND	9.8
Ethylbenzene	ND	9.8
m,p-Xylenes	ND	9.8
o-Xylene	ND	9.8

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate	Percent Recovery	Acceptance Limits
Bromofluorobenzene	109.3	75 -125%

Reference: Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

Comments:

Analyst

Review

Inter·Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

VOLATILE AROMATIC HYDROCARBONS

Giant

Project ID:	Soil Test OCD-Landfarm	Report Date:	05/16/96
Sample ID:	OCD-70-41696	Date Sampled:	04/16/96
Lab ID:	0396G00648	Date Received:	04/18/96
Sample Matrix:	Soil	Date Extracted:	04/24/96
Condition:	Cool/Intact	Date Analyzed:	04/29/96

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	9.9
Toluene	ND	9.9
Ethylbenzene	ND	9.9
m,p-Xylenes	ND	9.9
o-Xylene	ND	9.9

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate	Percent Recovery	Acceptance Limits
Bromofluorobenzene	109.2	75 -125%

Reference: Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

Comments:

Analyst

Review

Inter-Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

VOLATILE AROMATIC HYDROCARBONS

Giant

Project ID:	Soil Test OCD-Landfarm	Report Date:	05/16/96
Sample ID:	OCD-77-41696	Date Sampled:	04/16/96
Lab ID:	0396G00649	Date Received:	04/18/96
Sample Matrix:	Soil	Date Extracted:	04/24/96
Condition:	Cool/Intact	Date Analyzed:	04/29/96

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	9.8
Toluene	ND	9.8
Ethylbenzene	ND	9.8
m,p-Xylenes	ND	9.8
o-Xylene	ND	9.8

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate	Percent Recovery	Acceptance Limits
Bromofluorobenzene	108.7	75 -125%

Reference: Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

Comments:

Analyst

Review

Inter-Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

VOLATILE AROMATIC HYDROCARBONS

Giant

Project ID:	Soil Test OCD-Landfarm	Report Date:	05/16/96
Sample ID:	OCD-Center-41696	Date Sampled:	04/16/96
Lab ID:	0396G00650	Date Received:	04/18/96
Sample Matrix:	Soil	Date Extracted:	04/24/96
Condition:	Cool/Intact	Date Analyzed:	04/29/96

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	10.0
Toluene	ND	10.0
Ethylbenzene	ND	10.0
m,p-Xylenes	ND	10.0
o-Xylene	ND	10.0

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate	Percent Recovery	Acceptance Limits
Bromofluorobenzene	107.7	75 -125%

Reference: Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

Comments:

Analyst

Review

Inter·Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

VOLATILE AROMATIC HYDROCARBONS

Giant

Project ID:	Soil Test OCD-Landfarm	Report Date:	05/16/96
Sample ID:	OCD-Composite-41696	Date Sampled:	04/16/96
Lab ID:	0396G00651	Date Received:	04/18/96
Sample Matrix:	Soil	Date Extracted:	04/24/96
Condition:	Cool/Intact	Date Analyzed:	04/30/96

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	374	198.2
Toluene	670	198.2
Ethylbenzene	ND	198.2
m,p-Xylenes	2,880	198.2
o-Xylene	1,720	198.2

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate	Percent Recovery	Acceptance Limits
Bromofluorobenzene	98.9	75 -125%

Reference: Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

Comments:

Analyst

Review

Inter·Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

VOLATILE AROMATIC HYDROCARBONS
QUALITY CONTROL REPORT

Duplicate Analysis

Lab ID: 0396G00650
Sample Matrix: Soil
Condition: Cool/Intact

Report Date: 05/16/96
Date Analyzed: 04/29/96

Target Analyte	Duplicate Concentration (ppb)	Original Concentration (ppb)	% Difference
Benzene	ND	ND	NA
Toluene	ND	ND	NA
Ethylbenzene	ND	ND	NA
m,p-Xylenes	ND	ND	NA
o-Xylene	ND	ND	NA

ND - Analyte not detected at the stated detection limit.
NA - Not applicable or not calculated.

Quality Control:	Surrogate	Percent Recovery	Acceptance Limits
	Bromofluorobenzene	107%	75 -121%

Reference: Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

Comments:

Analyst

Review

Inter-Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

VOLATILE AROMATIC HYDROCARBONS
QUALITY CONTROL REPORT

Matrix Spike Analysis

Lab ID: 0396G00650
Sample Matrix: Soil
Condition: Cool/Intact

Report Date: 05/16/96
Date Analyzed: 04/29/96

Target Analyte	Spiked Sample Result in ng	Sample result in ng	Spike Added (ng)	% Recovery	Acceptance Limits (%)
Benzene	36.7	ND	45	81.6%	70-130
Toluene	42.1	0.41	45	92.6%	70-130
Ethylbenzene	41.7	ND	45	92.7%	70-130
m,p-Xylenes	83.2	0.27	90	92.1%	70-130
o-Xylene	42.9	0.16	45	95.0%	70-130

ND - Analyte not detected at the stated detection limit.
NA - Not applicable or not calculated.

Quality Control:

Surrogate	Percent Recovery	Acceptance Limits
Bromofluorobenzene	108.2%	75 -125%

Reference: Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

Comments:

Analyst

Review

Inter-Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

VOLATILE AROMATIC HYDROCARBONS
QUALITY CONTROL REPORT

Method Blank Analysis

Sample Matrix: Extract
Lab ID: Method Blank

Report Date: 05/16/96
Date Analyzed: 04/29/96

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	10.0
Toluene	ND	10.0
Ethylbenzene	ND	10.0
m,p-Xylenes	ND	10.0
o-Xylene	ND	10.0

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate	Percent Recovery	Acceptance Limits
Bromofluorobenzene	107.0	75-125%

Reference: Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

Comments:

Analyst

Review

Inter-Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

Quality Control / Quality Assurance

Known Analysis

BTEX

Client: **Giant Refining Co.**
Project: Soil Test OCD-Landfarm

Date Reported: 05/01/96
Date Analyzed: 04/30/96

Known Analysis

Parameter	Found Concentration (ppb)	Known Concentration (ppb)	Percent Recovery	Acceptance Limits
Benzene	10.0	9.0	**111%**	70-130%
Toluene	10.4	9.0	**116%**	70-130%
Ethylbenzene	10.1	9.0	**112%**	70-130%
m+p-Xylene	20.1	18.0	**112%**	70-130%
o-Xylene	10.4	9.0	**115%**	70-130%

Quality Control:

Surrogate	Percent Recovery	Acceptance Limits
Bromofluorobenzene	101.1	75-125%

Reference: Method 5030, Purge and Trap: Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

Comments:

Reported by _____

Reviewed by _____

Inter·Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

TOTAL PETROLEUM HYDROCARBONS
EPA METHOD 418.1

Giant Refining Co.

Project: Soil Test OCD-Landfarm
Matrix: Soil
Condition: Intact/Cool

Date Reported: 05/16/96
Date Sampled: 04/16/96
Date Received: 04/18/96
Date Extracted: 04/30/96
Date Analyzed: 05/01/96

Sample ID	Lab ID	Result (mg/kg)	Detection Limit (mg/kg)
OCD-25-41696	0396G00647	ND	20
OCD-70-41696	0396G00648	ND	20
OCD-77-41696	0396G00649	54.2	20
OCD-Center-41696	0396G00650	ND	20
OCD-Composite-41696	0396G00651	19,100	1,000

ND - Analyte not detected at stated detection level.

References: **Method 418.1:** Petroleum Hydrocarbons, Total Recoverable, USEPA Chemical Analysis of Water and Waste, 1978.

Method 3550: Ultrasonic Extraction of Non-Volatile and Semi-Volatile Organic Compounds from Solids, USEPA SW-846, Rev. 1, July 1992.

Analyst: _____ Reviewed: _____

Inter-Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

TOTAL PETROLEUM HYDROCARBONS
Quality Assurance/Quality Control

Giant Refining Co.

Project:	Soil Test OCD-Landfarm	Date Reported:	05/16/96
Matrix:	Soil	Date Sampled:	04/16/96
Condition:	Intact/Cool	Date Received:	04/18/96
		Date Extracted:	04/30/96
		Date Analyzed:	05/01/96

Duplicate Analysis

Lab ID	Sample Result	Duplicate Result	Units	% Difference
0396G00648	ND	ND	ppm	NA

Method Blank Analysis

Lab ID	Result	Units	Detection Limit
Method Blank	ND	ppm	20

Spike Analysis

Lab ID	Found Conc. (ppm)	Known Conc. (ppm)	Percent Recover	Acceptance Limits
Blank Spike	225	250	90%	70-130%

Known Analysis

Lab ID	Found Conc. (ppm)	Known Conc. (ppm)	Percent Recover	Acceptance Limits
QC	8.4	7.0	117%	70-130%

References:

Method 418.1: Petroleum Hydrocarbons, Total Recoverable, USEPA Chemical Analysis of Water and Waste, 1978.

Method 3550: Ultrasonic Extraction of Non-Volatile and Semi-Volatile Organic Compounds from Solids, USEPA SW-846, Rev. 1, July 1992.

Analyst: _____ Reviewed: _____

Inter·Mountain Laboratories, Inc.

2506 West Main Street | Farmington, New Mexico 87401 | Tel. (505) 326-4737

GIANT
OCD-LAND FARM

DATE MAY 8, 1996

Lab No.	LOCATION	pH	EC mhos/cm @ 25°C	Calcium meq/l	Magnesium meq/l	Sodium meq/l	Potassium meq/l	Ammonia ppm	Nitrate-Nitrogen ppm	Nitrite-Nitrogen ppm	Total Kjeldahl Nitrogen ppm
47064	OCD-25-41696	7.8	4.17	9.06	3.16	31.1	4.75	1.36	1.50	0.16	273
47065	OCD-70-41696	7.9	2.13	3.93	1.31	15.7	4.21	1.16	1.98	0.09	291
47066	OCD-77-41696	7.8	4.79	19.3	6.43	31.7	4.25	1.20	<.05	0.12	273
47067	OCD-CENTER-416	7.2	17.1	83.8	29.0	61.0	3.34	1.38	1.76	0.09	236

Inter-Mountain Laboratories, Inc.

2506 West Main Street | Farmington, New Mexico 87401 | Tel. (505) 326-4737

GIANT
OCD-LAND FARM

DATE MAY 8, 1996

Lab No.	LOCATION	HCO3 meq/l	CO3 meq/l	Fluoride PE ppm	Chloride PE meq/l	SO4 PE meq/l	Bromide PE ppm
47064	OCD-25-41696	2.20	<.01	0.89	14.8	27.8	1.80
47065	OCD-70-41696	2.80	<.01	0.96	7.96	9.43	0.50
47066	OCD-77-41696	2.00	<.01	0.79	9.57	45.1	<.10
47067	OCD-CENTER-4169	0.80	<.01	0.62	170	3.60	<.10

Inter- Mountain Laboratories, Inc.

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location	ANALYSES / PARAMETERS
GIANT	SOIL TEST OCD-LANDFARM	
Sampler: (Signature) HORST	Chain of Custody Tape No.	

Sample No./ Identification	Date	Time	Lab Number	Matrix	No. of Containers	TPH, BTEX RCRA METALS	GENERAL CHEMISTRY			Remarks
OCD-25-41696	4-16-96	SEE LABEL ON CONTAINERS		Soil	2	X	X			
OCD-70-41696	"			Soil	2	X	X			
OCD-77-41696	"			Soil	2	X	X			
OCD-Center-41696	"			Soil	2	X	X			
OCD-Composit-41696	"			Soil	1	X	X			
										Cool+intact

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Edward Horst	4-17-96	9:51	Chris Raynes	4/18/96	1030
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by laboratory: (Signature)	Date	Time

Inter-Mountain Laboratories, Inc.

☐ 1633 Terra Avenue, Sheridan, Wyoming 82801, Telephone (307) 672-8945
☐ 1701 Phillips Circle, Gillette, Wyoming 82718, Telephone (307) 682-8945
☒ 2506 West Main Street, Farmington, NM 87401, Telephone (505) 326-4737
☐ 1160 Research Dr., Bozeman, Montana 59715, Telephone (406) 586-8450
☐ 11183 SH 30, College Station, TX 77845, Telephone (409) 776-8945
☐ 3304 Longmire Drive, College Station, TX 77845, Telephone (409) 774-4999

34491

HAZMAT SPILL RESPONSE PROCEDURE
OSHA 1910.120
SAFE WORK PROCEDURE #421

I. HazMat Response Team Will Consult with Emergency Coordinator/Assess Situation

- A. Identify spill material and source
- B. Identify safe zones and decontamination area
- C. Coordinate spill response with other emergency response teams

II. Select Appropriate Response Equipment

- A. Protective clothing
  1. Class A - Fully enclosed suit with SCBA, chemical resistant boots and inner and outer gloves, two-way radio
  2. Class B - Chemical resistant clothing (alky suit w/ gauntlets), chemical resistant boots and gloves, SCBA, two-way radio and hard hat
  3. Class C - Chemical resistant clothing (alky suit), cartridge type full face respirator, boots and gloves, two-way radio, hard hat
  4. Class D - Work clothes, safety glasses or goggles, hard hat and safety boots
- B. Equipment and/or tools
- C. Decontamination equipment

III. Approach Through Optimum Safe Corridor

- A. Upwind
- B. Open access

IV. Initiate Spill Response

- A. One man (in appropriate protective clothing) on standby for each man in hot zone
- B. Control the spill
  1. Close feed valve
  2. Patch and/or plug
- C. Contain the spill
  1. With equipment
  2. With booms and pillows
- D. Initiate clean-up of spill
  1. Sample for testing if needed
  2. Remove contaminated soil or water
- E. Decontaminate
  1. Personnel
  2. Equipment

Date Issued: October 1995

Review Date: October 1996

Review Coordinated By:

Sr. Environmental Coordinator

Mercaption Sulfur in Gasoline, Kero. Aviaton Turbine, and Distillate fuels

alumina gel

Alkaline Titralion Solvent
- anhydrous sodium acetate
- 2-propanol

Acidic Titration Solvent
- anhydrous sodium acetate
- 2-propanol
- glacial acidic acid

Silver/Silver-Sulfide Electrode Preparation
- * Titration Solvent
- * Silver Nitrate, Standard Alcoholic Solution
- sodium sulfide

Silver Nitrate, Standard Alcoholic Solution
- silver nitrate
- 2-propanol

Cadmium Sulfate, Acid Solution
- *cadmium sulfate*
- sulfuric acid

* Prepared Solutions From Listed Chemicals

Lead Analysis by Spectrophotometer

tetraethyl lead

Iodine Solution
- iodine
- chloroform
- tetraethyl ammonium chloride

Buffer Solution
- anhydrous sodium sulfite
- ammonium hydroxide
- tetraethylene pentamine

Dithizone Solution
- diphenyldithiocarbazone

Diluent Solution
- isopropyl alcohol
- iso-octane

% wt. Sodium Hydroxide in Unit Caustic

Bromo Blue Solution (0.04% w/v) Aqueous Solution
- bromophenol blue sodium salt

sulfuric acid (.02.00 normal N/50)

Total Acidity

Titration Solvent
- toluene
- anhydrous isotropyl alcohol

p-Naphtholbenzein Indicator Solution
- p-naphtholbenzein

Potassium Hydroxide Solution, Standard Alcoholic
- potassium hydroxide
- anhydrous isopropyl alcohol
- barium hydroxide
- potassium acid phthalate
- phenolphthalein

HF Acid Stength and Water Content
- soda ash (neutralizer)
- KF titrant
- DRT-1 stable titrant
- DRT-5 stable titrant
- sodium hydroxide 1N
- acetone
- isopropyl alcohol
- P Indicator (nalco)
- HF acid

Water Reaction Interface and Separation

Phosphate Buffer Solution
- potassium monohydrogen phosphate, anhydrous
- potassium dihydrogen phosphate, anhydrous

Glass cleaning solution
- sulfuric acid
- potassium dichromate

Particulate
- petroleum ether

Lead Acetate Solution
- lead acetate flakes
- glacial acetic acid

Salt in Crude Analysis

Alcohol Solvent
- methyl alcohol, anhydrous
- n-butyl alcohol
- xylene

Existent Gum
- n-heptane

Glass Cleaning Solvent

toluene
acetone

Jet Fuel Thermal Oxidation Test

hexane
Tri-Solvent Glass Cleaner
acetone
toluene
isopropyl alcohol

Flouresent Indicator Adsorption

silica gel
isopropyl alcohol
ethyl alclhol
FIA standard dyed gel
acetone

Fuel System Icing Inhibitor

diethylene glycol monomethyl ether

Raney Nickel

Dithizone Solution
diphenylthiocarbazone
acetone
Hydrochloric Acid Solution
hydrochloric acid, concentrate
Mercuric Acetate, Low Titer
mercuric oxide
acetic acid
Sodium Hydroxide Solution
sodium hydroxide pellets
Sulfur Standard
dibutyl disulfide
iso octane
raney catalyst

Vapor Pressure

mercury
motor oil
Standards
n-pentane
toluene

Smoke Point Standards

iso octane
toluene
methyl alcohol, anhydrous

Bath Medium

anti-freeze

mineral oil
isopropyl alcohol
mineral spirits

General Application

sodium sulfate
potassium dichromate
anhydrous calcium sulfate (desecant)
sulfur standards

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

JAN 07 1994

CERTIFIED MAIL: RETURN RECEIPT REQUESTED

Mr. John J. Stokes, Manager
Giant Refining Company
Route 3, Box 7
Gallup, New Mexico 87301

RE: RFI Phase I and Phase II Supplemental Reports and
Voluntary Corrective Action Plan
Giant Refining Co.
NMD000333211

Dear Mr. Stokes:

The Environmental Protection Agency (EPA) hereby approves your RCRA Facility Investigation (RFI) Phase I Supplemental Report, dated October 21, 1991, with the enclosed list of modifications. Your Corrective Action Plans (CAPs) for the Sludge Pits and the Railroad Rack Lagoon, submitted in November and December, 1992, respectfully, are also approved with the enclosed list of modifications.

The EPA is requiring that additional monitoring be completed at several sites. An annual report detailing the monitoring results shall be submitted to the EPA by December 31, 1994, and each year thereafter. The EPA is also requiring that additional soil sampling be completed at the Sludge Pits and the Tank Farm. Sampling results shall be submitted to the EPA by October 1, 1994. Further information concerning the additional monitoring and sampling requirements may be found in the attached list of modifications.

If you have any further questions or need additional information, please contact Nancy Morlock at (214) 655-6650 or Richard Mayer at (214) 655-7442.

Sincerely yours,

Allyn M. Davis

Allyn M. Davis, Director
Hazardous Waste Management Division (6H)

Enclosure

cc: Kathleen Sisneros, NMED

APPROVAL WITH MODIFICATIONS
RFI PHASE I SUPPLEMENTARY REPORT
RFI PHASE II REPORT AND THE
VOLUNTARY CORRECTIVE ACTION PLANS

The Environmental Protection Agency (EPA) has completed a technical review of Giant Refining's RCRA Facility Investigation (RFI) Phase I Supplementary Report; RFI Phase II Report; and voluntary Corrective Action Plan (CAP) for the Sludge Pits and Railroad Rack Lagoon. The subject reports are hereby approved with the following comments and modifications.

GENERAL COMMENTS

SWMU 1, The Aeration Basin; SWMU 2, The Evaporation Pond; and SWMU 13, The Drainage Ditch

The EPA agrees with the finding of no further action for Solid Waste Management Units (SWMUs) 1, 2 and 13. The EPA is, however, requiring periodic monitoring of these SWMUs (see below under Modifications). However, this approval is contingent upon the completion of a survey plat for these SWMUs. The survey plats shall be completed in accordance with the requirements set forth in 40 CFR 264.116. Giant shall submit copies of the completed survey plats to the EPA for review and approval. Upon approval, Giant may submit a Class III permit modification to terminate the RFI/Corrective Measures Study (CMS) process for these SWMUs.

SWMU 6, The Tank Farm

The EPA disagrees with Giant on their recommendation of no further action. Sampling results indicate that 9 of the 13 samples taken at the 11 foot interval (the deepest interval sampled) contained elevated levels of BTEX constituents. One sample at the 16 foot interval also contained elevated BTEX levels. The EPA is therefore requiring deeper sampling at specified points (see below under Modifications).

SWMU 8, The Railroad Rack Lagoon, Overflow Ditch and Fan Out Area

The EPA agrees with the finding of no further action for this SWMU. The EPA understands that Giant has elected to perform voluntary corrective measures at this unit which will include bioremediation of the wastes with periodic soil and waste monitoring. Giant's voluntary bioremediation should reduce the volume and toxicity of the wastes while continuing to periodically monitor the SWMU. The EPA will, however, require that additional monitoring be completed (see below under Modifications). The EPA is also requiring that a survey plat be completed for this SWMU. The survey plat shall be completed in accordance with the requirements set forth in 40 CFR 264.116. Giant shall submit a copy of the completed survey plat to the EPA for review and approval. Upon approval, Giant may submit a Class III permit modification to terminate the RFI/Corrective Measures Study (CMS) process for this SWMU.

SWMU 9, The Sludge Pits
The EPA is unable to approve Giant's finding of no further action for this SWMU. Two (2) soil samples collected at the 15 foot interval (the deepest interval sampled) contained semivolatile contaminants. The EPA is therefore requiring deeper sampling at specified points (see below under Modifications). Giant may begin the voluntary bioremediation (see SWMU #8 voluntary corrective action) under the CAP after the deeper soil samples have been completed.

MODIFICATIONS

SWMU 1, The Aeration Basin
Giant shall take soil samples around the Aeration Basin every two (2) years beginning in calendar year 1994. Sampling requirements shall be identical to those performed during the previous RFI, except that all soil borings shall be angled and an additional sample shall be collected at the 20-21 foot interval. Results shall be included in the appropriate Annual Monitoring Report (1994, 1996, etc.).

SWMU 6, The Tank Farm
Giant shall complete additional soil borings as close as possible to the following sample points (numbers correspond to previous RFI sampling points completed in May, 1991): 21, 22, 23, 25, 26, 27, 30, and 31. The sampling interval shall be at 16 feet, with the exception of sample point 31 which shall be sampled at 20 feet. Samples shall be analyzed for BTEX constituents. Sampling must extend vertically until no subsequent increase in contamination levels is likely to occur. A minimum of two (2) "clean" samples are required to verify delineation. The results of this sampling event shall be submitted to EPA by October 1, 1994.

SWMU 2, Evaporation Ponds
Giant shall monitor the seven (7) groundwater wells around the evaporation ponds biannually for the same constituents monitored for in the original RFI. Results shall be included in the Annual Monitoring Report.

SWMU 13, Drainage Ditch between APIs Evaporation Ponds and Neutralization Tank Evaporation Ponds
Giant shall conduct soil sampling around the Drainage Ditch every two (2) years, with sampling beginning in calendar year 1994. Sampling procedures and analytical constituents shall be identical to those required in the RFI, except that all soil borings shall be angled and an additional interval shall be sampled at from 6.0-6.5 feet. Results shall be included in the appropriate Annual Monitoring Report (1994, 1996, etc.).

SWMU 6, The Railroad Rack Lagoon

Giant shall take 5 soil borings within the lagoon after it has ceased receiving wastes. Three (3) of the five (5) borings must be sampled at the 0-1 foot interval. All borings must be sampled at the 5-6 foot interval, the 10-11 foot interval, and the 14-15 foot interval. Sampling procedures and analytical constituents shall be identical to those required in the previous RFI. Sampling results shall be included in the 1994 Annual Monitoring Report.

Additionally, all six (6) borings required under the CAP closure (Section 5.0) must be sampled at the 5-6, 10-11, and 14-15 foot interval. Sampling procedures and analytical constituents shall be identical to those required in the previous RFI. Sampling results shall be included in the appropriate Annual Monitoring Report.

Monitoring requirements under the voluntary CAP shall be submitted to EPA in the appropriate quarterly progress report. Giant shall notify the EPA when final closure of the Railroad Rack Lagoon has been initiated.

Continuation of SWMU 6, The Overflow Ditch

Giant shall complete three (3) soil borings in the Overflow Ditch after closing the Railroad Rack Lagoon. Sampling procedures and analytical constituents shall be identical to those required in the previous RFI. Soil samples shall be collected at the 3.0 - 4.0 and 6.5 - 7.0 foot interval. All results shall be included in the 1994 Annual Monitoring Report.

Continuation of SWMU 6, The Fan Out Area

Giant shall complete four (4) soil borings in the Fan Out Area after closure of the Railroad Rack Lagoon has been completed. Sampling procedures and analytical constituents shall be identical to those required in the previous RFI. Soil samples shall be collected at the 3.0 - 4.0 and 6.5 - 7.0 foot interval. Results shall be included in the 1994 Annual Monitoring Report.

SWMU #12, Contact Waste Water Collection System (CWWCS)

Giant shall perform an inspection of the CWWCS every five years beginning in calendar year 1996. The inspection shall be identical to the one performed in the previous RFI. If better technological equipment is developed, Giant may request that an alternative method be used. Results shall be included in the appropriate Annual Monitoring Report.

SWMU 9, The Sludge Pits

Giant shall complete soil borings as close as possible to sampling points 6 and 7 (numbers correspond to previous RFI sampling points, completed in May, 1991). Sampling intervals shall be at 18.0 -19.0 foot and 24.0 - 25.0 foot. Sampling procedures and analytical constituents shall be identical to those required in the previous

RFI. Sampling must extend vertically until no subsequent increase in contamination levels is likely to occur. A minimum of two (2) "clean" samples are required to verify delineation. The results of this sampling event shall be submitted to the EPA by October 1, 1994.

Before final closure of the West Pit under the CAP, all soil borings shall be sampled at the 18.0 - 19.0 and 24.0 - 25.0 foot intervals. Sampling procedures and analytical constituents shall be identical to those required in the previous RFI. Four (4) soil borings shall also be completed (before closure) in the East Pit using the same requirements specified for the West Pit borings. Results shall be included in the appropriate Annual Monitoring Report.

Monitoring requirements under the voluntary CAP shall be submitted to EPA in the appropriate quarterly progress report. Giant shall notify the EPA when final closure of the Sludge Pits has been initiated.

Soil Boring Logs: The EPA has included an example of a soil boring log to be used for all future borings.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

JAN 7 1994

CERTIFIED MAIL: RETURN RECEIPT REQUESTED

Mr. John J. Stokes, Manager
Giant Refining Company
Route 3, Box 7
Gallup, New Mexico 87301

RE: RCRA Facility Investigation (RFI) Phase III Report and Voluntary Corrective Action Plan
Giant Refining Co.
NMD000333211

Dear Mr. Stokes:

The Environmental Protection Agency (EPA) hereby approves your RCRA Facility Investigation Phase III Report dated November 3, 1992, with the enclosed modifications. The EPA is requiring that additional soil sampling be completed at several sites, including the Landfill Areas, the Old Burn Pit, the Secondary Skimmer, and the Fire Training Area. A supplementary report detailing the results of these sampling activities shall be submitted to the EPA by December 31, 1994.

Additionally, the EPA is approving the voluntary Corrective Action Plan for the Landfill Areas, submitted in March, 1993.

If you have any further questions or need additional information, please contact Nancy Morlock at (214) 655-6650 or Richard Mayer at (214) 655-7442.

Sincerely yours,

Jack Dinita

for Allyn M. Davis, Director
Hazardous Waste Management Division (6H)

Enclosure

cc: Kathleen Sisneros, NMED

APPROVAL WITH MODIFICATIONS
GIANT REFINING COMPANY
RCRA FACILITY INVESTIGATION PHASE III REPORT
AND THE
CORRECTIVE ACTION PLAN FOR THE LANDFILL AREAS

The Environmental Protection Agency (EPA) has completed a technical review of your RCRA Facility Investigation (RFI) Phase III Report, dated October, 1992, and your voluntary Corrective Action Plan for the Landfill Area, dated February, 1993. The subject reports are hereby approved with the following comments and modifications.

GENERAL COMMENTS

SWMU 5, The Empty Container Storage Area
The EPA hereby approves the finding of No Further Action (NFA) for Solid Waste Management Unit (SWMU) number three (3), the Empty Container Storage Area. However, this approval is contingent upon the completion of a survey plat for the unit. The survey plat shall be completed in accordance with the procedures outlined in 40 CFR 264.116. Giant shall submit a copy of the survey plat to the EPA for review and approval. Upon approval, Giant may submit a Class III permit modification to terminate the RFI/Corrective Measures Study (CMS) process for the Empty Container Storage Area.

SWMU 8, The Old Burn Pit
Due to the presence of elevated levels of volatile and semivolatile contaminants in soil samples from this unit, the EPA is unable to approve Giant's finding of No Further Action. All three (3) soil samples taken at the 4.5 foot interval (the deepest interval sampled) contained elevated levels of heavy molecular weight semivolatiles. Additionally, one of the three (3) samples at the 4.5 foot interval also contained elevated BTEX levels. The EPA is therefore requiring deeper sampling at specified points (see below under Modifications).

SWMU 11, The Secondary Oil Skimmer
Due to the presence of elevated levels of volatile and semivolatile contaminants in soil samples from this unit, the EPA is unable to approve Giant's finding of No Further Action. One of the two (2) samples taken at the 3.0 foot interval (the deepest interval sampled) contained volatile and semivolatile contaminants. The EPA is therefore requiring deeper sampling at specified points (see below under Modifications).

SWMU 4, The Fire Training Area
Due to the presence of elevated levels of oil and grease in soil samples from this unit, the EPA is unable to approve Giant's finding of No Further Action. Two (2) of the four (4) samples

taken at the 4.5 foot interval (the deepest interval sampled) contained oil and grease above 2,000 ppm. The EPA is therefore requiring deeper sampling at specified points (see below under Modifications).

SWMU 7, The Landfill Areas

Because soil borings completed in this unit indicate the presence of waste and metal contamination at depths up to 9.5 feet, the EPA is requiring that additional soil borings be completed at greater depths. These additional soil borings will be installed in order to:

1) Verify that saturated zones found in three (3) of the 12 deepest soil boring intervals are isolated and are not connected to the groundwater;
2) Ensure that the vertical extent of waste emplacement has been defined;
3) Confirm that the vertical extent of metal contamination has been delineated.

Following the completion of the additional soil borings in the Landfill Areas, Giant may proceed with the capping of the landfills as per their voluntary Corrective Action Plan.

MODIFICATIONS

Note: All referenced sampling points correspond to the previous RFI sampling points completed in May, 1992. Soil boring logs included in future report submittals shall follow the attached example.

SWMU #8, The Old Burn Pit

Giant shall complete soil borings as close as possible to sample points one (1), two (2) and three (3). Sampling intervals shall be at six (6) and (10) feet and must extend vertically until no subsequent increase in contaminant levels is likely to occur. A minimum of two (2) "clean" samples are required to verify delineation. Sampling procedures and analytical requirements are identical to those required in the previous RFI. The results of this sampling event shall be submitted to the EPA by December 31, 1994.

SWMU #11, The Secondary Oil Skimmer

Giant shall complete two (2) soil borings within the area occupied by the former Skimmer. All borings must be sampled at the 5-6 foot and 9-10 foot interval. Sampling shall extend vertically until no subsequent increase in contaminant levels is likely to occur. A minimum of two (2) "clean" samples are required to delineate contamination. Sampling procedures and analytical requirements are identical to those required in the previous RFI. The results of this sampling event shall be due to EPA by December 31, 1994.

SWMU #4, The Fire Training Area

Giant shall complete angled soil borings as close as possible to sample points one (1) and two (2). Sampling intervals shall be at 7 and 11 feet. Sampling must extend vertically until no subsequent increase in contaminant levels is likely to occur. A minimum of two (2) "clean" samples are required to delineate contamination. Sampling procedures shall be identical to those required in the previous RFI. Analytical constituents shall include the Skinner constituents. The results of this sampling event shall be submitted to the EPA by December 31, 1994.

SWMU #7, The Landfill Areas

Giant shall take soil borings as close as possible to sample points two (2) through seven (7), and nine (9). Sampling intervals shall be at 11 feet, 16 feet and 20 feet. Sampling must extend vertically until no subsequent increase in contaminant levels is likely to occur. A minimum of two (2) "clean" samples are required to delineate contamination. Sampling procedures shall be identical to those required in the previous RFI. Giant shall analyze all samples for metals. If volatile or semivolatile contamination is encountered when sampling, then those constituents shall be analyzed also. The results of this sampling event shall be due to EPA by December 31, 1994.

DAILY POND INSPECTION

DATE: _____

INSPECTED BY: _____

POND #	FREEBOARD	DIKE CONDITION	IMMEDIATE ACTION NEEDED?
1			
2			
3			
4			
5			
6a			
6b			
7			
8			
9a			
9b			
9c			
9d			
11			
12a			
12b			

COMMENTS: _____

Check all ponds daily for dike condition and at least once weekly for freeboards. If dikes are in need of immediate repair or attention, contact the Environment Department or the weekend duty person. Check also for unusual flow from or into the ponds.

GIANT REFINING COMPANY

RCRA STORAGE AREA COMPLIANCE CHECKLIST

SITE DESCRIPTION:

GENERAL REQUIREMENTS:

1. Has the generator initiated a hazardous waste determination. **YES** **NO**

   COMMENTS: _____

2. WASTE TYPES: **D** **F** **K** **P** **U**

   COMMENTS: _____

3. Are containers in good condition? **YES** **NO**

   COMMENTS: _____

4. Is waste compatible with containers? **YES** **NO**

   COMMENTS: _____

5. Are hazardous waste containers marked with the words "HAZARDOUS WASTE"?

YES **NO**

COMMENTS: _____

_____

_____

_____

6. Is there an accumulation start date on every container in the <90 day storage area?

YES **NO**

If yes, complete the following table:

Container I.D. Number:	Accumulation Start Date	Type of Waste

COMMENTS: _____

_____

_____

_____

7. Has the waste exceeded 90 days? **YES** **NO**

COMMENTS: _____

_____

_____

_____

8. Are constituents of waste on containers or log sheets? **YES** **NO**

COMMENTS: EXAMPLE

9. Are containers closed? **YES** **NO**

COMMENTS: EXAMPLE

10. Has there been any hazardous waste spills or leaks? **YES** **NO**

If yes, explain: EXAMPLE

11. If storage area is outside, is the waste in a dry, sheltered area and on pallets or similar devices so that they are off the ground? **YES** **NO**

COMMENTS: EXAMPLE

12. Is the storage area free of obstacles and deterioration? **YES** **NO**

COMMENTS: _____

13. Is the <90 day storage area inspected weekly? **YES** **NO**

COMMENTS: _____

14. Are the <90 day storage area signs and danger signs prominently posted and visible?

YES **NO**

COMMENTS: _____

15. Is there spill control equipment, emergency equipment, communication equipment, and decontamination equipment at the <90 day storage area? **YES** **NO**

LIST EQUIPMENT ON SITE: _____

16. Is there adequate aisle space between containers in the <90 days storage are?

YES **NO**

COMMENTS: _____

17. Have the operators/inspectors for the <90 storage area completed and are they up-to-date on the required training? **YES** **NO**

COMMENTS: _____

18. Is a copy of the Contingency Plan at the <90 day storage area? **YES** **NO**

COMMENTS: _____

19. COMMENTS: _____

_____ _____

Inspector's Signature ***Date of Inspection***

ISSUE EACH TUESDAY
STEVE MORRIS

FILE 11.01.C.07.H

Date: _____

RCRA WASTE FACILITIES

INSPECTION CHECKLIST

LAND TREATMENT AREA:

Dike Condition? _____

Water Standing? _____

Signs? Legible _____ Wet or Dry? _____

Time of day: _____ AM or PM Date: _____

Monitor wells and general condition _____ Caps and Locks _____

Lysimeters? Unit condition _____ Protective cover _____

Tensiometers reading: _____

Fences? Condition _____

TRICHLOROETHANE DRUM STORAGE AREA:

Drums in good condition? _____

Number of drums? _____

Time of day: _____ AM or PM Date: _____

Laboratory TCE Drum condition? _____ Bungs in place? _____

Limestone in the Neutralization Tank? _____

Repairs needed: ____ _____

_____ _____

Every Monday of Month

_____ To be done on _____

12-8 shift

Repairs completed: _____

Date

_____

_____

_____

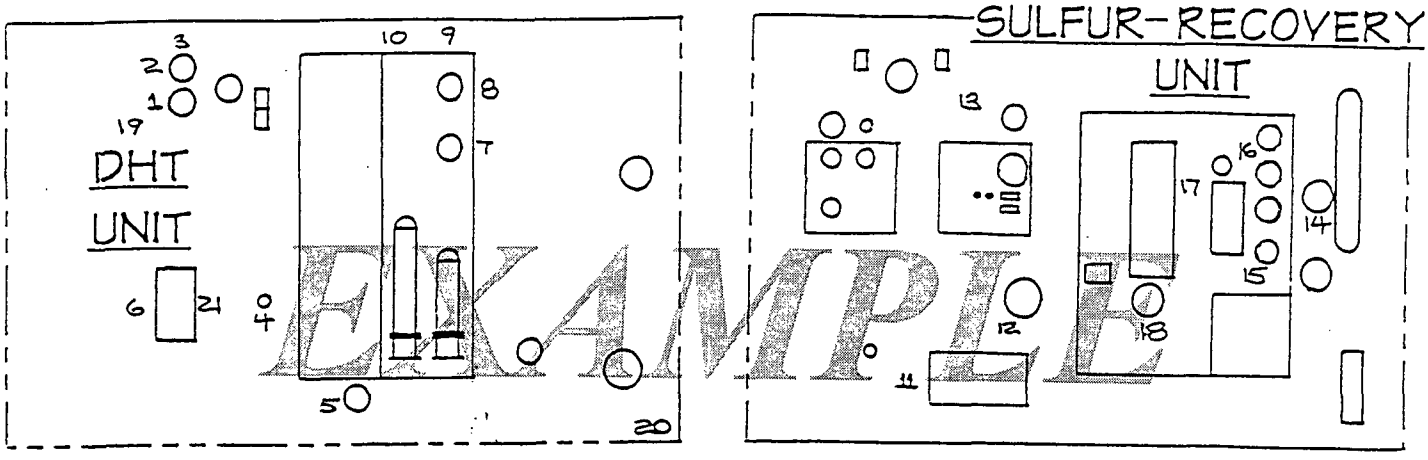
Name of Inspector

[BJJlc:\data\WORD\memos\DCP\rcra-wst.doc]

GIANT REFINING COMPANY
CINIZA ENVIRONMENTAL
40 CFR 61 SUBPART QQQ –

DHT / SRU WEEKLY DRAIN SEAL INSPECTION

INSPECTION DATE: _____ INSPECTION BY: _____



DRAIN #	LOCATION	SEALED?	COMMENTS
1	NEAR D-V9B		
2	NEAR D-V9A		
3	NEAR D-V1		
4	NEAR D-V19 (STEAM)		
5	NEAR D-V7		
6	NEAR D-C4		
7	NEAR D-V3		
8	NEAR D-V5		
9	NEAR D-V4		
10	NEAR D-V4 (SLOP)		
11	NEAR SR-C1		
12	NEAR SR-T4		
13	NEAR SR-V7, SR-V8, & SR-V9		
14	NEAR SR-T5		
15	IN SRU BLDG NEAR SR-T7		
16	IN SRU BLDG NEAR SR-T8		
17	IN SRU BLDG NEAR SR-A1		
18	IN SRU BLDG NEAR SR-P111A		
19	NEAR V-V9A & D-V9B		
20	SEWER JUNCTION BOX		
21	NEAR D-C4		

FACILITY INSPECTION

WEEK OF: _____ 19____

DATE: _____ BY: _____

PROCESS UNIT AREA

1. Spills? Yes_____ No_____
2. Drum in Area? Yes_____ No_____ Area_____ Quantity_____
3. Leaks in Area? Yes_____ No_____ Area_____
4. Comments: _____

HOT OIL TANK FARM

1. Spills? Yes_____ No_____
2. Drum in Area? Yes_____ No_____ Area_____ Quantity_____
3. Leaks in Area? Yes_____ No_____ Area_____
4. Comments: _____

BUNDLE CLEANING AREA

1. Does sump contain material other than water? Yes_____ No_____
   Estimated Quantity_____ Wet_____ Dry_____
2. Staining in Area? Yes_____ No_____
3. Drums in Area? Yes_____ No_____
4. Comments: _____

RAILROAD LOADING RACK

1. Spills? Yes_____ No_____
2. Drum in Area? Yes_____ No_____ Area_____ Quantity_____
3. Leaks in Area? Yes_____ No_____ Area_____
4. Comments: _____

_____

BARREL STORAGE AREA

1. Estimated Number of Barrels _____

   Crushed _____ To Be Crushed _____
2. Stained Soil? Yes_____ No_____
3. Comments: _____

_____

PIPELINE AREA

1. Spills in Area? Yes_____ No_____
2. Leaks in Area? Yes_____ No_____
3. Drums in Area? Yes_____ No_____
4. Comments: _____

_____

LANDFILL

1. Unauthorized Waste? Yes_____ No_____
2. Asbestos in Area? Yes_____ No_____
3. Comments: _____

_____

API SEPARATOR

1. Structural Integrity? Yes_____ No_____
2. Tank 105: Level? _____ft Pump? _____
3. Benzene Strippers and Pumps? _____
4. Parshall Plume Volume _____ inches _____ gpm
5. Aeration Lagoons? Clear _____ Discolored _____
6. Pond #2 Outlet Volume _____ inches _____ gpm
7. Comments: _____

CARPENTER SHOP AREA

1. OC Fuel Pumps: Stains? _____ Leaks? _____
2. Paint Storage Shed: Drums or Cans? _____ Yes_____ No_____
   Quantity _____ Stains? _____
3. Comments: _____

TRUCK LOADING AREA RACK, ADDITIVE TANKS & ETHANOL UNLOADING

1. Spills in Area? Yes_____ No_____ Area_____
2. Sumps? _____ Spills in Area? Yes_____ No_____
   Area? _____
3. Comments: _____

TANK FARM

1. Stains? Yes_____ No_____ Area?_____
2. BBLS in Area? Yes_____ No_____ Area?_____
3. Leaks on Valves, Water Draws, Sample Points? Yes_____ No_____
4. Comments: _____

_____

ASBESTOS STORAGE AREA

1. Fence?_____ Signs?_____
2. All Material Double Bagged? _____
3. Material That Needs to be Drummed? _____
4. Need to Schedule Disposal Pick-Up? _____
5. Comments: _____

_____