September 15, 2006

OIL AND GAS DOCKET NO. 08-0246533

THE APPLICATION OF MITCHELL COUNTY RESOURCE RECOVERY FACILITY, LLC TO CONSIDER A COMMERCIAL STATIONARY TREATMENT FACILITY, THE MITCHELL COUNTY FACILITY, MITCHELL COUNTY, TEXAS

HEARD BY: Thomas H. Richter, P.E., Technical Examiner
Marshall Enquist, Hearings Examiner

APPLICANT:	**REPRESENTING:**
Bart Huffman	Mitchell County RRF, LLC
Tom Whitesides	
Georgeann Whitesides	
Dennis L. Patton	
Ellen Patton	

PROTESTANT:	
J. David Hall, attorney Troy A. Powell	Mitchell County Concerned Citizens for Environmental Protection
Zachary S. Brady, attorney	Lone Wolf Groundwater Conservation District

PROCEDURAL HISTORY

Date of Application:	February 28, 2006
Date of Notice:	April 20, 2006
Date of Hearing:	June 28-29, 2006
Date of Transcript:	July 17, 2006
Date of Written Closing Statements:	August 1, 2006
Date PFD Issued:	September 19, 2006

EXAMINERS' REPORT AND PROPOSAL FOR DECISION
STATEMENT OF THE CASE

This is the application of Mitchell County Resources Recovery Facility, LLC ("MCRRF") to construct and operate a commercial stationary waste recycle treatment facility in Mitchell County. The facility will accept only Commission authorized non-hazardous oil and gas field waste material that will be combined with inert earthen material to produce a "cold" type asphalt road construction pavement product.

Protesting the application are area surface owners, which organized the Mitchell County Concerned Citizens for Environmental Protection ("Citizens"). Citizens are concerned with

potential groundwater contamination, the commercial necessity of the proposed facility, the sufficiency of financial security and ownership of the proposed facility.

Lone Wolf Groundwater Conservation District ("Lone Wolf") is concerned with the possible risk of pollution of surface and subsurface waters. Lone Wolf asserts that Groundwater Conservation Districts are responsible for the plugging of abandoned wells. Lone Wolf fears that after this facility is closed, it could potentially be facing enormous liability in terms of potential remediation of the aquifer. Therefore, if the application is approved, Lone Wolf believes additional bonding beyond the normal site cleanup is in order.

Environmental Services proposed a draft permit that would have been administratively issued had protests not been filed.

DISCUSSION OF THE EVIDENCE

APPLICANT'S EVIDENCE

The subject facility site encompasses approximately 11.88 acres lying south of IH-20 in Mitchell County on top of a plateau. The surrounding property, 160 acres, is owned by the seller of the 11.88 acre site, Bobby Moody. The rural site is 4 miles from any city, town or school and at least ½ mile from any residence.

The proposed facility site is an old abandoned caliche pit quarry which is excavated to a depth of at least 12' below the ground surface. According to the Texas Water Development Board ("TWDB"), the site is situated over the Dockum aquifer, an aquifer that is classified as a minor aquifer in this area of Mitchell County. The TWDB reports/maps show that the Ogalala aquifer, a major aquifer, does not exist in this area of Mitchell County. Operations will be conducted on the floor of the quarry with no potential for runoff of any materials as the quarry floor is located at least 12' below the ground surface. There is still a substantial interval of caliche rock material below the floor of the facility as was observed and recorded during the drilling of three monitor wells.

All "holding" and "staging" areas that will contain the stabilized oil field waste material will be on at least 4" thick concrete pads as required by the Commission's Environmental Services recommendation/requirement. On top of the concrete pads will be a minimum of 12" of caliche "fines" to insure against concrete damage and liquid absorption. The concrete and the caliche fines will provide for complete and total prevention of any liquid migration. Each "holding" or "staging" area additionally will be surrounded by and separated from each other by earthen berm banks.

This is not a disposal facility but a recycling facility. Recycling is a preferred method to disposal. Statewide Rule 30(f)(1)(A) states in part: *"The TCEQ and the RRC encourage generators to eliminate pollution at the source and recycle whenever possible to avoid disposal of solid wastes"*. This facility/process will produce no waste material. The raw materials and the product will not remain on site for long periods of time. The non-hazardous oil field wastes that are accepted are the raw materials to be used as an ingredient in a process to produce a nonhazardous, commercially viable asphalt-stabilized paving product. Waste materials are tested and stabilized

at the point of generation before arriving and being accepted at the proposed facility. The materials that the Commission has authorized for a recycling facility are: water-based drilling fluids and associated cuttings, oil-based drilling fluids and associated cuttings, tank bottoms from gas plants and crude oil reclamation plants, materials from produced water collecting pits, produced formation sand, soil affected by produced water. However, material with high chlorides will not be accepted because of the adverse effect on the pozzolans[1] which provides the strength in the asphalt product. The materials that will be mixed to form the Asphalt Incorporated material are the aggregates of native rock, caliche and gravel which provide for the pozzolanic process and give extra strength. Other inert materials that are encouraged by waste minimization standards, the State of Texas and the United States EPA for recycling include: cement, brick, recycled road materials and recycled asphalt. TxDOT (Texas Department of Transportation) has an aggressive program to utilize recycled materials. The final product will meet the TxDOT Standard 3157 for cold-processed recycle paving materials.

The cold-processed asphalt is not a solvent-based emulsion but is a water-based emulsion with no volatile organic compounds inherent within the materials. The product will smell like asphalt but the aroma will not be as intense as the asphalt produced from a hot-mix plant. The proposed waste material recycling plant must also comply with the rules and regulations of the TCEQ air emissions.

The “pug mill” is the mechanical device which achieves the active mixing and blending of the materials. The output product of the pug mill, will be conveyored and stacked in the Final Product Staging Area for delivery. The final product will not release any liquids. For the chemical reaction to take place in the pug mill and curing, the volume of supply water is closely monitored and any left over water is in microscopic amounts and will evaporate only, it will not puddle and run off, thus there will be no leaching. There will be no excavations within the facility site for the supply of raw material. Caliche will be transported to the site of generation and mixed to stabilize the waste materials and the stabilized waste product will be subjected to the paint filter test (an industry/regulatory standard leachate test) to determine whether or not liquids will release themselves from the solid. The test insures that the semi-solids will not release liquids. All free liquids of the raw material must be removed at the point of generation. Upon arriving at the subject facility, a load check program is made i.e. bill of lading, weighed, visual inspection, moisture content test, NORM testing, chloride testing. Depending on what comprises the load, the load is placed in the appropriate Staging Area. The moisture content is critical in the mix design of fine aggregates, medium-sized aggregates and large aggregates which are blended with the pazzolans and with the water-based asphalt emulsion. If the material is too dry, the asphalt emulsion with not dissipate through the matrix of the actual materials within that specified mix. If the material is too wet, then the cementing action of the pozzolanic is lost. As the outside 2-3" layer cures, it prevents the water base emulsion from breaking and the inside material stays fresh and workable.

The finished product is stabilized and the oil field waste will not migrate away. The

[1] lime cement, cement kiln dust, fly ash or other cementitious type material.

manufactured product will be tested. There are various leachate tests where the materials are crushed to a nominal size and subjected to a seven-day extraction process. The fluids extracted are run through a mesh filter. The remaining solids are analyzed to determine the degree of fixation, stabilization and encapsulation of the constituents.

There are three environmental tests:

> The TCPL (toxicity characteristic leaching procedure as the materials are immersed in an acidic solution).
>
> The SPLP approximates climatic conditions and is the method preferred and required test procedure by the Commission (materials are subject to neutral pH water for a period of seven days, agitated and extracted).
>
> The Texas seven-day distilled water leachate method, a TxDOT method that is used by the TCEQ (materials are placed in neutral pH water and agitated 24-hrs a day for seven days).

The Commission also requires for environmental purposes, the SPLP EPA Method 1312 for the metal determination of arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver.

Pursuant to TCEQ rules, once the materials are qualified as product and pass the engineering and environmental standards as stipulated within the proposed permit conditions, the materials are no longer considered waste. The materials management program for this facility tracks the waste materials from the point of generation to the final point of application. All environmental and analytical testing shall be performed by a third party asserting the materials are nonhazardous. The files will be maintained for a period of ten years.

THE HOLDING/STAGING AREAS

All the holding and staging areas will have at least a 4" concrete pad installed to bear the load of the resting material scheduled for that compartment. See attached facility schematic for area and equipment location. Area No. 1 (250' x 150') will stage the various types of inert aggregate materials. Area No. 2 (250' x 250') is the cold mix asphalt production area which includes the pug mill. This area will be surrounded by a containment berm which at its lowest will be a minimum of 2' high in the front. This area will contain the piles of the three sizes of screened aggregates. The stabilized non-hazardous waste materials will be conveyored over from the various staging areas to be mixed in the pug mill with the aggregates and the water based asphalt emulsion. The product material is discharged into Area No. 3 (200' x 200'), the Final Product Staging Area into specific lots. This area will be surrounded by a containment berm which at its lowest will be at least a minimum of 2' high in the front and on the quarry wall side, the berm will be 20' high and will be 12' high on the adjacent sides. Below the Final Staging Area is Area A (225' x 250') which is a tank bottom stabilization area and will have 12" of caliche fines on top of the concrete pad and no more than 12" of tank bottoms.

Each compartment Area B - G will have a minimum of a 3' slope front to back. Each

compartment will be separated by a 6' berm. The front of each compartment will have a 2' berm and the back of each compartment will have a wall ranging from 12' to 20' high. The length of all the areas is 50' but the widths range from 100' to 150'. All these staging areas will have a minimum 4" concrete pad and at least 12" of caliche fines on top of the concrete.

PRODUCT SAMPLING

A product production sample will be obtained from the pug mill's product discharge conveyor belt at 200-ton (aliquot) intervals.[2] These aliquots will be composited into a sample for each 800-ton lot.[3] If the product is to be used on a TxDOT project, then the product must pass Department Material Specification DMS-11,000 which is the environmental criteria for recycling of nonhazardous materials and TxDOT 3157 is the engineering requirement. DMS-11,000 mirrors 30 TAC 335.1(h)(1) for the use of recycled materials; a standard employed by the TCEQ.

WATER SUPPLY

Make-up water will come from an excavated reservoir that was constructed during the building of IH-20 that collects rain water and runoff from the town area of Westbrook. The reservoir site is a common area used by area drillers for oil and gas industry requirements. In drilling the monitor wells, which were drilled to 125', the water that was encountered did not pass pump tests for sustained water supply. Thus, the alternative would be to purchase commercial water or drill a water well to the brackish Santa Rosa Formation (Dockum Group) and obtain a small desalination unit to utilize the water. According to the Texas Water Development Board Report No. 50 (the only published report by TWDB dealing with this area and aquifers), no fresh water is produced from the deep Santa Rosa. Water quality data and reports by residents and well drillers indicate that no significant quantities of fresh water are available west of the Colorado River in this area. MCRRF submits the water that was encountered in the monitor wells is from a perched water zone which is not connected with the Santa Rosa formation.

THE WEATHER

The National Weather Service states the highest recorded 24-hr rainfall was 6.88". The entire 11.88 acre site is surrounded by a berm and the facility itself is located inside the quarry pit which is 12' deep. Topographic maps show that the run off from this area of the plateau will be away from Lake Colorado City. Between evaporation (Commission allows 30% on land farm permits) and the 12" of caliche fines on top of the concrete pads, a normal 1" rain would never reach the concrete pad.

MONITOR WELLS

---

[2] MCRRF initially submitted 150-ton interval, but the Commission recommended 200-ton intervals.

[3] MCRRF initially submitted 1500-ton lots, but the Commission recommended 800-ton lots.

Three monitor wells were drilled to a depth of 125' to ascertain the geology and any water encounters. Reports for all three wells were filed on Texas Department of Licensing and Regulation Well Reports. Monitor wells No. 1and No. 3 are located on the quarry floor. Both show at least 15' of caliche . The Well No. 1drilling report indicates water depth strata reported at 67'/97' and a static water level of 80'. The Well No. 2 (located outside the quarry on the plateau) drilling report shows 8' of caliche and the water depth strata reported at 83'/92' and a static water level of 79'. The Well No. 3 drilling report shows a water depth strata reported at 50'/95' and a static water level of 70'. The drilling reports state the type of water is good, but no chemical analysis was performed. The reports show that there is at least 40' of various intervals of caliche and/or clays between the surface and the "Depth of Strata" reported by the driller on the Texas Department of Licensing and Regulation Well Report.

Ground water will be regularly monitored (analysis on a quarterly basis) as required by the Commission's ESD Permit. The proposed permit also requires that two more monitor wells be completed for a total of five monitor wells. MCRRF believes the protestants have not thoroughly read and understand the limits, restrictions and requirements of the permit proposed by the Commission's Environmental Services Department. Further MCCRF asserts that Lone Wolf did not present any evidence to substantiate its assertion that the Commission's ESD draft permit would not prevent pollution or contamination.

In rebuttal of the protestants' evidentiary witness, geologist Troy Powell, applicant argues that his testimony represents only his opinions with no published articles to substantiate said opinions unless he happened to agree with the TCEQ. There may be indications of the Ogalala "Formation" in this area of Mitchell County, but there is no general published data (TCEQ or otherwise) that supports or substantiates it recharges the Santa Rosa formation with groundwater. MCRRF asserts via the published information, that the Santa Rosa is not a continuous, contiguous aquifer at uniform depths below the ground surface. This fact is substantiated by TWDB and its reports and area water well driller logs. Powell states that at this subject site, the Santa Rosa has been deprived of recharge thus the water volume is low. The reason the volume is low at the site is that the Santa Rosa is indeed cut off in all directions. The water encountered in the monitor wells is perched water which is supported by TWDB Report No. 50... "Perched water tables occur in shallow beds of both the Santa Rosa and the Chinle Formations". The drilling reports show that the sand/shale colors change as to description and color of formation material from well to well.[4] This is a clear indicator that there is not a uniform contiguous formation across the site which thus indicates that this is a perched aquifer. If it were continuous, the markers and the indicators should be the same.

MCRRF calculates the closure cost of the facility to be $299,004.00 as of June 2005 without the concrete pads. The Commission estimated a closure cost of $261,655 in December 2005 with the concrete pads.

The majority owner of MCRRF is Onyx Contractors and the Commission Form P-5

[4] See Texas Department of Licensing and Regulation Well Reports.

(Organization Report) for MCRRF is current. MCRRF agrees to all Environmental's Services recommendations for permit approval and will install all physical requirements subject to Commission inspection and approval prior to commencement of operations and the Trial Run probation time to demonstrate that approval of the facility operation is warranted and appropriate. Notice was published in the *Colorado City Record*, a newspaper of general publication in Mitchell County, on May 12 and 19, 2005.

PROTESTANTS EVIDENCE

Lone Wolf did not present a direct case but pursued cross examination and reliance on Citizens geologist. Lone Wolf asserts that MCRRF has not met its burden of proof. [5]

MCRFF demonstrated no ability to provide financial security. MCRRF has not made the bond, letter of credit or cash deposit as required by TNRC §91.109 (the minimum $25,000 required to be filed with Commission Form P-5) in addition to the specific financial security that would be required by the permit for closure. The primary shareholder, Maurizio Iaquaniello - owner of Onyx Construction, Inc., is financially unstable to the point that the Chief Operating Officer has gone without pay for a year.

The application process and hearing on the part of the applicant had numerous errors which will be indicative of MCRRF's conducting of its daily business. Exhibit No. 1 was the entire permit application with numerous subsections and no method to indicate which witness was sponsoring any part. This is an indication of how MCRRF will conduct its "business" and shows a complete lack of earnestness and professionalism.

The facility will pose a threat to the surface and subsurface waters. Citizen's geologist asserts that the Santa Rosa can recharge from areas where a productive water well may not be maintainable and this fact is supported by TWDB Report No. 50. The Ogalala Formation is present in Mitchell County and contributes to the Santa Rosa recharge. Lone Wolf asserts there is no such thing as "bedrock caliche" or "impermeable bedrock" in a caliche pit. There is most likely percolation from the subject site into the groundwater and if this application is approved that would include oil and gas waste, as it will percolate also into the groundwater. Caliche either absorbs liquids such as those MCRRF will use in its plant process or it doesn't. Hence this is most likely the reason that the Commission's Environmental Services required the concrete pads. But the concrete pads alone will not remedy run off from the site. The pads do not cover the entire area and

[5] At the close of the Applicant's evidentiary presentation, Lone Wolf moved for Summary Disposition and was instructed by the examiner to submit the motion along with its closing brief. Lone Wolf submitted a Motion for Judgment as a Matter of Law, a motion not contemplated by the Commission's Rules of Practice and Procedure and therefore one that the examiners cannot rule on. The motion is equivalent to a Motion for Summary Judgment, also not contemplated in Commission rules. Lone Wolf asserted that Applicant's witnesses all had a pecuniary interest in the outcome of the hearing and that their testimony was unreliable as a consequence. Application cases before the Commission are commonly presented by a company with a pecuniary interest in the outcome of the application in that the witnesses presented are commonly employees of the applicant company or paid consultants. If such economic interests alone disqualified testimony, virtually all expert witnesses would be disqualified. In the present case, the examiners find that Applicant's witnesses' testimony, under Texas Rules of Evidence 702, did "...assist the trier of fact to understand the evidence or to determine a fact in issue..." and is admissible, reliable expert testimony.

will be subject to cracking, thus leaking. Heavy mobile equipment will be operated on the pads.

MCRRF has not shown that there is a market for the final product. If it can not be sold, it will only pile up.

Lone Wolf referred to a report by Arcadis, Geraghty & Miller about the ground water in Mitchell County.[6] The report states there are Ogalala sands that do not bear water in producing quantities that appear to constitute an effective avenue for recharge of the underlying Santa Rosa formation and Trinity sands in areas of Mitchell County. However in western Mitchell County, the Ogalala sediments yield small quantities of usable water varying in quality to domestic and livestock wells. Lone Wolf points out the three monitor wells all had contained water and the conclusions in the AG&M report agree with TDWB Report 50. (MCRRF pointed out that the areas stated in the report do not include the area in Mitchell County where the subject facility will be located).

Citizen's geologist asserts the following (in summary):

> There is recharge going on as the Santa Rosa flows west to east to its out crop in the Colorado River. From 2 miles west of the Colorado River, the water in the Santa Rosa is about 3,000 ppm saturated solids and it ranges downwards to the river to fresh. The productive capacity at and near the proposed site is expected to range from a few gallons per minute near the surface increasing with depth to several hundred gallons per minute where the formation terminates on top of the Permian formation. The proposed site would pollute the shallower Santa Rosa in this area. TWDB Report 50, written in 1967, was about the Santa Rosa water east of the Colorado River and the Santa Rosa was not significant west of the river. The local water board plans on desalination of the Santa Rosa water west of the river as the water is a future resource.
>
> The outcrop map in TWDB Report 50 shows the proposed site to be on the Triassic outcrop. The proposed site location is between the Ogalala outcrops on the east and the west of the proposed site elevation and thus the site is located on the basal Ogalala. The basal Ogalala is upon the Triassic outcrop or in this case the Santa Rosa outcrop. The erosional remnants of the Ogalala formation at this site creates an effective conduit to groundwater through sand and gravel to the Santa Rosa Formation below. The Ogalala constitutes and effects the recharge to the sand and gravel below the site or near the site of the Triassic. Caliche deposits occur in the Ogalala as well and the Ogalala was the source of the caliche deposits in the Santa Rosa. This indicates that the Santa Rosa recharges by the ground water from the Ogalala. Located within one mile of the proposed site, the Mitchell County Groundwater Authority has stated there are 24 shallow water wells that did not get

[6] The report was not offered as an exhibit but parts were read into the record.

down to the Santa Rosa. The wells are modest in quality and yield but they are the only wells in the immediate area. Any water in the subject quarry pit will percolate into the incised Santa Rosa below.

This is not high grade caliche as there are constituents in the mix. A 4" thick slab of concrete will collapse under its own weight and rebar will only rust.

EXAMINERS' OPINION

The examiners recommend the application be approved pursuant to Commission Statewide Rule 8 to receive, store, handle, and treat certain non-hazardous oil and gas wastes subject to the conditions as proposed by the Commission's Environmental Services staff. The proposed commercial stationary waste recycle treatment facility will be constructed and completed in such a manner as to prevent the migration of the nonhazardous waste material or final product that would enter and result in the pollution of the subsurface water by alteration of the physical, thermal, chemical or biological quality or the contamination of the surface or subsurface water.

The safe and proper disposal of non-hazardous oil field wastes serves the public interest. Indeed, the recycling treatment of such material into a viable product that can benefit the general public such as road paving material is a win-win formula. The waste materials listed in the proposed permit are restricted to only non-hazardous wastes (from the catalog of waste materials defined by Rule 8(a)(26)).

The proposed permit is restrictive, detailed and specific in what can and cannot be done, how it will be done, the testing that will be performed (what, how, when and what to test for and the acceptable limits), and the required record keeping.
Summarizing some of the permit parameters that were of concern by the protestants:

> The permit is for 5 years. Semi-annual reports are required. Any chemicals that are used must have a MSDS (Material Safety Data Sheet) filed and approved by the Commission. Any analysis that are to be performed as required by the permit shall be performed by an independent laboratory neither owned or operated by the permittee.

Monitor wells:

> There will be a total of five monitor wells (three having all ready been completed). Certain tests must be run on the wells at least quarterly and submitted in the semi-annual report.

Trial run:

> The process must undergo a trial run to show a successful process on the first 1000 cubic yard batch before continuation. The Commission must be notified and will witness. Samples as required will be collected and analyzed and a report filed with the Commission within 30 days. No other material shall be accepted or the final product removed until Environmental Services verifies the results and determines the waste was successfully processed.

Waste Testing and Record Keeping:

> The list of parameters includes: when samples are be collected and at what interval, the tests to be performed including the maximum and or minimum standards, record keeping for 10 years.

Construction, Operation and Process Control:

> Detailed requirements for the numerous staging, stabilization and processing areas and concrete required pad areas. The entire facility shall not exceed no more than 3,000 tons of raw material or 6,000 tons total for the facility at any given time. Records shall be kept on a weekly basis and shall include density conversion (ton to cubic yard) and this information shall be included in the semi-annual report. Certain concrete pads must be cleared and inspected annually for deterioration and repairs, if any, must be made before resuming use of the pad. Sample collection and testing requirements. Final Product documentation and analysis.

The concern of Lone Wolf and Citizens of possible pollution of subsurface waters in the Santa Rosa or Chinle or any other named potentially water bearing interval of the Dockum Group is understood by the Examiners. The water may not be of excellent quality/quantity and may only be used for livestock, vegetation, etc., but if it's the only water accessible, it is vital.

The concern of the protestants is that any free liquid within the quarry would migrate through the caliche floor and through the various "permeable" layers into the Santa Rosa/Chinle and then migrate horizontally. Protestant assert that this is verified by the static water levels observed in the three monitor wells. MCRRF demonstrated, however, that not only is there no horizontal continuity of the Santa Rosa in this area, but the water that was observed in the monitor wells was the result of perched water which was substantiated by pump tests indicating no significant recharge.

The proposed permit thoroughly addresses the issues of protecting any surface or subsurface water. Section IV of the permit addresses the wastes that may be accepted. Section V addresses the waste testing and record keeping requirements. Sections VI and VII address the facility design, construction, operations and process control. Section VIII addresses final deposition of the roadbase material. If TxDOT believed there was a potential environmental problem with the roadbase product, it would not have written a specification for a cold-mix product that would leach out and pollute surface and subsurface waters along the road ways. Indeed, hot-mix does use a hydrocarbon base solvent emulsion and is commonly used on road ways. Section IX addresses the facility closure.

The proposed permit requires that a trial run must be made and all permit conditions be met prior to full implementation for the facility to receive full Commission authority. This trial run will require a substantial capital expenditure. All conditions and requirements must meet with Commission District Office approval.

There is no persuasive evidence to indicate that the operation of the subject facility will adversely impact the water quality of any nearby surface water or subsurface usable quality water. MCRRF relies on TWDB Report No. 50 as it relates to aquifers in this specific area of Mitchell County. The TWDB report should be considered as a starting point for determining groundwater issues. From this point, <u>site specific</u> data is collected hence MCRRF drilled and completed three

monitor wells (two within the quarry itself).

FINDINGS OF FACT

1. Notice of this hearing was given to all persons required to be given notice by the provisions of Statewide Rule 8. Notice was published in the *Colorado City Record*, a newspaper of general publication in Mitchell County, on May 12 and 19, 2005.

2. Mitchell County Resources Recovery Facility, LLC ("MCRRF") has applied for a permit to construct and operate a commercial stationary waste recycle treatment facility in Mitchell County. The facility will accept only Commission authorized non-hazardous oil and gas field waste material that will be combined with inert earthen material and a water base emulsion to produce a "cold" type asphalt road construction pavement product.

3. The subject facility site encompasses approximately 11.88 acres on top of a plateau. The proposed facility site is at the bottom of an old abandoned caliche pit quarry which is at least 12' below the ground surface. Operations will be conducted on the quarry floor with no potential for runoff of any materials.

4. Only Commission approved non-hazardous oil field waste material will be accepted to be used as an ingredient in a process to produce a nonhazardous, commercially viable asphalt-stabilized paving product.

    a. Waste materials are tested and stabilized at the point of generation before arriving and being accepted at the proposed facility.

    b. The materials that the Commission has authorized for the subject recycling facility are: water-based drilling fluids and associated cuttings, oil-based drilling fluids and associated cuttings, tank bottoms from gas plants and crude oil reclamation plants, materials from produced water collecting pits, produced formation sand, soil affected by produced water (materials with high chlorides will not be accepted).

    c. The inert materials that will be mixed to form the cold-processed asphalt are the aggregates of native rock, caliche, gravel, cement, brick, recycled road materials and recycled asphalt which will be blended with the pazzolans (lime cement, cement kiln dust, fly ash or other cementitious type material).

    d. The proposed facility is not a disposal facility but a recycling facility.

5. The cold-processed asphalt is not a solvent-based emulsion but is a water-based emulsion with no volatile organic compounds inherent within the materials.

    a. The cold-processed asphalt is stabilized and will not allow any oil field waste material to leave the product.

b. The raw materials and the manufactured cold-processed asphalt will be tested per the requirements as stated in the proposed permit. The final product will be analyzed to determine the degree of fixation, stabilization and encapsulation of the constituents.

c. For a TxDOT (Texas Department of Transportation) project, the final product must pass Department Material Specification DMS-11,000 which is the environmental criteria for recycling of nonhazardous materials and TxDOT 3157 for the engineering requirement.

6. All materials will be confined to designated staging or holding areas that shall so be constructed to insure no fluid migration of oil field waste material or final product material.

a. All the holding and staging areas will have at least a 4" concrete pad installed to bear the load of the resting material scheduled for that compartment to prevent vertical migration.

b. All the holding and staging areas shall be bermed in such a manner to prevent horizontal migration.

c. All the holding and staging areas with concrete pads shall be covered with 12" of caliche “fines” for the protection of the concrete pads and fluid absorption.

7. Five monitor wells shall be tested on a quarterly bases to ascertain specific data and that data reported to the Commission semi-annually.

8. The process must undergo a trial run to show a successful process on the first 1000 cubic yard batch before continuation. The Commission must be notified and will witness. Samples as required will be collected and analyzed and a report filed with the Commission. No other material shall be accepted or the final product removed until Environmental Services verifies the results and determines the waste was successfully processed.

9. Mitchell County Resources Recovery Facility, LLC does have a current approved Form P-5 and shall maintain adequate financial assurance as required by the Commission.

a. The estimated closure bond for the subject facility shall be set at $300,000.

10. The safe and proper disposal of non-hazardous oil field wastes and the recycling treatment of such material into a viable product that can benefit the general public such as road paving material serves the public interest.

11. Statewide Rule 30(f)(1)(A) states The Texas Commission on Environmental Quality and the Railroad Commission encourage generators to eliminate pollution at the source and recycle whenever possible to avoid disposal of solid wastes”.

CONCLUSIONS OF LAW

1. Proper notice was timely given to all parties entitled to notice pursuant to applicable statutes and rules.

2. All things have occurred and have been accomplished to give the Commission jurisdiction in this case.

3. The use of the proposed will not endanger or cause the pollution of surface water or fresh water strata.

4. The applicant has complied with the requirements for approval set forth in Commission Statewide Rule 8 and the provisions of §27.051(b)(1), (2) and (3) of the Texas Water Code.

EXAMINERS' RECOMMENDATION

Based on the above findings and conclusions, the examiners recommend that the application of Mitchell County Resource Recovery Facility, LLC ("MCRRF") to construct and operate a commercial stationary waste recycle treatment facility in Mitchell County with specific conditions and requirements in the attached permit be approved.

Respectfully submitted,

Thomas H. Richter, P.E.
Hearings Examiner
Office of General Counsel

Marshall Enquist
Hearings Examiner
Office of General Counsel