MEMO

TO	File AQ/FAC/RACT/42-00011
FROM	David G. Balog DGB New Source Review Section Chief Air Quality Program
THROUGH	Eric Gustafson 12/11/19 Regional Program Manager Air Quality Program Northwest Regional Office
DATE	December 10, 2019
RE	Review of Alternate RACT II (Case by Case) International Waxes Plant Keating Township, McKean County

Introduction:
On October 24, 2016, International Waxes, Inc. (hereafter "IWI") submitted a RACT II-related case by case analysis for the entire facility. **This review consists of only the alternate RACT proposal from 25 PA Code §129.99.** IWI currently operates under Title V Operating Permit ("TVOP") Number 42-00011, and operates as a petroleum wax facility. The TV permit was last renewed on 10-3-2016 and expires 9-30-2021.

Background:
This facility is a major stationary source of both NOx and VOCs and was in existence before July 20, 2012. As such, in accordance with 25 Pa. Code §129.96, this facility is subject to the Department's RACT II requirements under §§129.97-129.100. In accordance with §129.99(d)(1)(i), the facility was required to submit a RACT proposal by the October 24, 2016 deadline.

This proposal addresses 3 sources subject to an alternative RACT NOx proposal pursuant to §129.99(b), and 2 sources subject to an alternative RACT proposal for VOC pursuant to §129.99(c). Any sources subject to §129.97 presumptive RACT II requirements were already addressed in the TVOP renewal.

Original RACT I Approval:

IWI original RACT 1 Approval/Permit was issued March 14, 1996 (attached for reference). It contained NOx limits and testing requirements for the existing 4 coal/oil fired boilers, required applicable NOx sources to comply with presumptive limits, required VOC emissions from tanks > 40,000 gallons capacity to be incinerated, and required plant wide fugitive emissions to be controlled by use of LDAR.

The wastewater treatment plant (Source ID 300) and flue gas holder (Source ID 303) were not addressed in the RACT 1 permit (no limits or conditions could be located). The wastewater treatment plant did undergo a RACT 1 analysis, but controls were determined to be not cost effective.

EPA Preliminary Comments on RACT II Proposal:

On 4/26/18, Leslie Jones of EPA provided 5 comments she developed during her preliminary review of IWI's RACT II Proposal. IWI's response is located in Attachment 1.

Alternative NOx RACT 2 Proposal:
Background:

IWI operates three (3) primary coal fired boilers, installed prior to 1970. None are currently capable of firing natural gas. The NOx Potential to Emit for these 3 boilers, based on burning 100% coal, are as follows: Boiler #1, 487tpy, Boiler #2, 379 tpy, and Boiler #3, 270 tpy. These are numbered as Sources 031A, 032A, and 033A respectively, in the TVOP.

All 3 boilers currently have RACT I based emission limits (lb/mmbtu) and (lb/hr) in the TVOP.

IWI has also installed two (2) newer boilers, Boiler 5 (Source 035) & Boiler 6 (Source 036). Both boilers are designed to burn primarily natural gas, with fuel oil as backup. Both boilers are online and do in fact burn gas only. Both are equipped with low NOx burners and flue gas recirculation.

The Department issued Plan Approval 42-011C to IWI on June 20, 2016. This plan approval laid out the overall plan on how the facility was going to comply with 40 CFR 63 Subpart DDDDD, or the "Boiler MACT" rule. Essentially, the facility is going phase itself out of burning coal. They will do this by retrofitting two of the existing coal fired boilers (031A & 032A) to burn primarily natural gas, shutting down the third coal fired boiler (033A), and operating Boiler 5 & Boiler 6 on natural gas as they currently already are. In the end, the 4 boilers that will be operating will be able to meet the presumptive RACT 2 limits for natural gas fired combustion units >50 mmbtu/hr.

Boilers 5 & 6 (Source 035 & 036) can comply with the presumptive RACT 2 requirements of 0.1 lb NOx/million Btu for natural gas fired combustion units >50 mmbtu/hr. The TVOP renewal in 2016 already includes these limits, plus stack testing requirements, that will take effect when all construction under the plan approval 42-011C is complete.

The retrofit of Boilers 1 and 2 (031A & 032A), with the boilers operating on natural gas only, is expected to be complete by November 1, 2020. At that point, Boiler 3 (Source 033A) would be shut down permanently (by 12/31/20). The facility then would be operating Boilers 1, 2, 5 and 6, burning natural gas only, and the coal burning would cease.

NOx RACT 2 Proposal for Sources 031A, 032A, 033A

The presumptive NOx RACT II limits for coal-fired combustion units with a rated heat input equal to or greater than 50 mmbtu/hr and less than 250 mmbtu/hr, cannot be greater than 0.45 #/mmbtu heat input. Boilers 1, 2 and 3, prior to conversion to natural gas firing, are subject to these limits. However, actual emission data indicates these limits cannot be met. IWI indicates the types of burners and combustion chamber design of these boilers as they sit today, will not allow these presumptive limits to be met. It is important to note Boiler #1 was installed in 1946, Boiler #2 was installed in 1940, and Boiler #3 was installed in 1968. Therefore, IWI prepared an alternate RACT proposal, using a "top down" analysis. It identified several different NOx control technologies that are technically feasible for the 3 boilers, as follows:

General NOX Control Technology Type(s)	Potential NOX Control Efficiency
Retrofit boilers to fire natural gas/replace coal fired boilers with natural gas-fired boilers	95
Selective Catalytic Reduction (SCR)	90
Selective Non-Catalytic Reduction (SCR)	85
Ultra Low NOX Burners (ULNB)	80
Low NOx Burners (LNB)	50
Flue Gas Recirculation (FGR) or Overfire Air (OFA)	40
LNB and FGR or OFA	60

The retrofit and/or replacement of coal firing units with natural gas firing units, provides an approximate 95% reduction in NOx emissions, the highest level of control. As IWI is currently implementing this alternative, and it has the highest NOx control efficiency, DEP concurs that alternative RACT 2 for the 3 existing coal fired boilers is for the facility to continue implementing their coal burning phase-out plan. Further economic analysis of the other alternatives here is therefore irrelevant.

Because the retrofit of Boilers 1 and 2 and shutdown of Boiler 3 will occur in the near future, and there is no intent to continue burning coal, it is illogical to expect IWI to install additional RACT II controls while burning coal, while the gas conversion is taking place. IWI states in a RACT report supplement:

"Significant modifications to Boilers #2 and #3 would need to occur in order to meet the presumptive RACT coal-based emission limits in the interim. Since there was no intent to continue long-term operation using coal and the fuel conversions to natural gas are fully underway, the facility cannot employ such modifications as a practical matter."

DEP recommends the following alternative RACT II approach for Boilers 1, 2 and 3:

(1) Include enforceable milestones & dates in the modified Title V RACT permit, for IWI to complete the retrofit of Boilers 1 & 2 to burn gas only, and shutdown of Boiler 3:

- Startup, Shakedown and Operation of Boiler #1 burning natural gas: by February 29, 2020
- Begin Retrofit of Boiler #2 to burn natural gas only: by April 30, 2020
- Startup, Shakedown and Operation of Boiler #2 burning natural gas: by November 1, 2020
- Permanent Shutdown of Boiler #3: by December 31, 2020

(2) Upon startup after gas conversion, Boilers 1 & 2 shall comply with a 0.036 lbs NOx/mmbtu limit, which is more stringent than the presumptive RACT II limit of 0.1 lb NOx/mmbtu.

(3) In the interim, until the retrofit/shutdown is complete, the 3 boilers will remain subject to the RACT I NOx limits & conditions already included in the TV Permit. Boilers 1 & 2 limits are 1.03 lb/mmbtu, and Boiler 3 is 0.684 lb/mmbtu.

As IWI is already implementing this strategy to comply with the Boiler MACT rule, it makes sense that these efforts will also satisfy RACT 2.

Alternate VOC RACT 2 proposal:

In accordance with §129.99(d)(1), the facility shall submit a written RACT proposal in accordance with the procedures in §129.92(a)(1)-(5), (7)-(10) and (b). From 25 PA Code §129.99(a), the facility may propose an alternative RACT requirement or RACT emission limitation in accordance with subsection (d).

IWI has 2 sources subject to an alternate VOC RACT 2 proposal: the Wastewater Treatment Plant (Source ID 300), with a VOC PTE of 49 tpy; and the Flue Gas Holder (Source ID 303), with a VOC PTE of 14 tpy.

Wastewater Treatment Plant VOC RACT2 discussion:

The wastewater treatment plant at IWI (Source ID 300) is in the form of two parallel API Separators with interior dimensions of 58'x8'x8.5', with tops open to the atmosphere. Average wastewater flow through the API Separators is 400,000 – 500,000 gallons per day, with a design

flow of 700,000 gpd. Dissolved organic content at the WWTP consists of toluene, methyl ethyl ketone, and naptha. Organics/oils on the surface are removed via skimming equipment and further control of organics occurs inherently via gravity separation technology. The VOC emissions come from the dissolved organic constituents evaporating as fugitives. Estimated PTE is 49 tons/year.

In their top down analysis, IWI evaluated the following possible controls:

- Thermal Oxidation, potential control efficiency 99%
- Carbon Adsorption, potential control efficiency 90- 95%
- API Separator Cover (fixed or floating), potential control efficiency 90%
- Good operating practices

They ruled out Carbon Adsorption as technically infeasible, as the MEK in the wastewater is not compatible with this technology and could present significant fire hazards & safety concerns.

IWI did find a combination fixed/floating cover system on the API separators, with the captured VOC vapors being purged to a downstream thermal oxidizer, as technically feasible. Merely placing a cover on the API separators is not technically feasible, as the vapors could build up to potentially explosive levels. Therefore, a purge of these captured vapors to a downstream control device is deemed a necessary cost as part of this control alternative.

IWI used the sixth edition of the EPA OAQPS Control Cost Manual, and vendor quotes, to analyze cost effectiveness of this control option. The cost of the covers plus the downstream thermal oxidizer was determined to be economically infeasible, with control costs estimated at $8,790/ton VOC removed. (IWI was asked to re-do their analysis subtracting out sales tax and property taxes, that were initially included. The revised analysis still did not show this option was cost effective.)

Recommended Alternative VOC RACT2 for the Wastewater Treatment Plant:

DEP proposes good operating practices, as the Alternative VOC RACT 2 for Source ID 300. The following condition should be added to the existing TV work practice requirements:

- Any floating product (i.e. wax) is routinely skimmed from the wastewater treatment plant API separators, and the skimmed material is returned to the production process.

Flue Gas Holder VOC RACT2 discussion:

The Flue Gas Holder (Source ID 303) is an inverted 8' diameter tank that floats in a reservoir of water with an exposed surface area to atmosphere of 13 ft^2. It receives VOCs (mainly MEK and toluene) lost to the Flue Gas System, including VOCs from the MEK Unit and from the flue gas blanket on MEK/Toluene storage tanks. VOC emissions are fugitive from this source.

IWI estimates the Potential to Emit as currently about 14 tons per year. They evaluated the following controls:

- Thermal Oxidation, potential control efficiency 99%
- Carbon Adsorption, potential control efficiency 90- 95%
- Good Operating Practices

Similar to the Wastewater Treatment Plant, IWI ruled out Carbon Adsorption as technically infeasible. IWI explains in their analysis that ketones can polymerize on the activated carbon bed, clogging adsorption sites. Aldehydes and ketones can also lead to carbon bed fires, if auto ignition temperatures are reached and oxygen is present. The Flue Gas Holder receives mainly MEK and toluene.

IWI did find that that capturing the VOC fugitive emissions and routing them to a downstream thermal oxidizer is technically feasible. However, the cost/benefit analysis using the EPA OAQPS Manual, yielded a figure of $12,000/ton of VOC controlled, making this option economically infeasible. (IWI was asked to re-do their analysis subtracting out sales tax and property taxes, that were initially included. The revised analysis still did not show this option was cost effective.)

Recommended Alternative VOC RACT2 for Flue Gas Holder:

DEP proposes good operating practices, as the Alternative VOC RACT 2 for Source ID 303. They consist of the following:

- The Flue Gas Holder shall be operated in accordance with manufacturer/facility specifications and good engineering practices.

- A positive pressure nitrogen blanket is to be maintained on the flue gas holder at all times, to minimize volatilization of organic compounds.

Recommended Emission Limits & Method of Compliance

The emission limits below represent the PTE at which add-on controls were determined not to be economically feasible in the RACT II analysis. As these are uncontrolled fugitive sources, there is no feasible way to develop or enforce short term RACT II limits. DEP is recommending, per EPA's 11/4/19 comments, the long term PTEs for these sources be incorporated as annual VOC RACT II limits and included in the SIP.

Source ID 300 – Wastewater Treatment Plant

Recommended emission limit is 49 tpy VOC, calculated as a 12-month rolling total, with compliance to be demonstrated via throughput and emission factors.

Source ID 303 – Flue Gas Holder

Recommended emission limit is 14 tpy VOC, calculated as a 12-month rolling total, with compliance to be demonstrated via throughput and emission factors.

Conditions:

- For Boilers 1, 2 and 3, the retrofit/shutdown milestones, dates, and lbs NOx/mmbtu limits discussed above need added to the TV Permit, and identified as RACT 2. These are the RACT2 requirements that will need incorporated into the SIP.

- The additional good operating practices outlined above for the wastewater treatment plant and flue gas holder, and the annual VOC limits, need added to the TV permit, and identified as RACT2. These are the RACT2 requirements that will need incorporated into the SIP.

Summary:

This RACT II Proposal was submitted to EPA on October 17, 2019, to begin their informal comment period. EPA submitted comments on this RACT II Proposal on November 4, 2019, and the Department modified this memo in response to those comments.

It is recommended the NWRO Facilities Section process a Title V operating permit modification application to incorporate these alternate RACT II conditions & limits into the facility operating permit, to be included in the State Implementation Plan.

cc: New Source Review - Hrsbg.
File AQ/FAC/RACT/42-000-00011
EPA Region 3

Attachment 1

November 13, 2019

Mr. David G Balog, P.E.
New Source Review Chief
Department of Environmental Protection
230 Chestnut Street
Meadville, PA 16335

RE: Responses to Inquiry by Ms. Emily Bertram of EPA concerning International Waxes, Inc. (#42-00011) Reasonably Achievable Control Technology (RACT) proposal of October 26, 2016

Dear Mr. Balog:

Provided herein are responses to questions provided in the above referenced request.

> **Question #1** - According to the previously SIP-approved permit for this facility (OP 42-110, dated March 14, 1996), the permit addresses the following sources that were not addressed in the facility's RACT II Proposal: Boiler 4, Storage tanks greater than 40,000 gallons capacity, and Plant-wide fugitive emissions. Please discuss how these sources are covered under the RACT II rule and whether the RACT II conditions are more or less stringent than the SIP-approved conditions, or whether the sources have shutdown.
>
> If the RACT II conditions are less stringent than the SIP-approved permit then an anti-backsliding will be necessary to relax requirements, otherwise the requirements still remain in place.
>
> **Response #1:** All emission sources at IWI were reviewed in accordance with the RACT II requirements of §129.97. Facility sources fit into one of three categories: 1) presumptive - as provided in §129.97(c)(1-8) or §129.97(g)(1); 2) Alternative (do not fall into any presumptive category so reviewed on a case-by-case basis), or 3) Existing - already covered by another provision in §129.51-77.
>
> A letter was provided to the Pennsylvania Department of Environmental Protection (PADEP) on September 9, 2016, addressed to Mr. Matthew Williams, which addressed the RACT status of all emission sources at the facility. It noted

the RACT applicability and category (i.e., presumptive, alternative, or existing) of every source listed in the Section A of Title V Operating permit. Only those sources which fit into the Alternate category were included in the October 24, 2016 Alternative RACT Proposal. All other sources will either meet the presumptive RACT requirements or are already covered by other RACT requirements in §129.51-77.

As a note, there is no Boiler #4 at the facility. Storage tanks greater than 40,000 gallons capacity are covered by §129.56. All other boilers at the plant will be covered by Plan Approval conditions, which are more stringent than the presumptive RACT requirements of §129.97(g), and/or the Alternative RACT proposal. Plantwide Fugitive Emissions are covered by §129.58. Facility heaters, fire pumps, generator and flares are covered by presumptive conditions in §129.97(c).

Question #2 - In the cost estimates, the facility relies on vendor quotes for the cost of purchased equipment. The facility must provide all vendor quotes and other documents which show the estimated costs of installing pollution control equipment. In addition, because this RACT evaluation and determination is to become a State Implementation Plan (SIP) revision, all documentation must be publicly available at the time of the SIP public comment period. Note to PADEP: Because Vendor quotes are typically based on confidential or proprietary information, please be aware of any Confidential Business Information (CBI) claims as they are typically claimed by the vendor and not the facility.

Response #2: The vendor quote that was relied upon in the RACT Alternative Case Proposal for the wastewater treatment system main two covers is provided as an Attachment A. Note: the quote is just for the two main covers of the separator, the three other smaller covers costs were ratioed from the main two cover quotes and added to the capital cost. The thermal oxidizer cost was based upon EPA air Pollution control Manual estimates of $30/cf of air to be controlled from the separator (once covered).

Question #3 - The facility identifies Boilers 1, 2, and 3, the Wastewater Treatment Plant, and the Flue Gas Holder as the sources required to have an alternative RACT evaluation. While the Wastewater Treatment Plant and Flue

Gas Holder are sources that do not have a presumptive limit in 129.97, the three boilers are subject to presumptive limits. Please identify why Boilers 1, 2, and 3 cannot meet the presumptive limits as required by the RACT II rule.

Response #3: Boilers #1, #2 and #3 have all been permitted (through the Plan Approval process) for elimination of coal firing (i.e., they had all been scheduled for permanent conversion from coal firing to gas firing). Boiler #1 is already being converted, so coal use has permanently ceased. Boiler #3 permanent shutdown is intended for December 31, 2019, at which time firing on coal will permanently cease. Boiler #2 conversion is scheduled to be completed by December 31, 2020. In the past (Boiler #1) and present (Boilers #2 and #3) the state of the design and operation were/are not capable of meeting the presumptive RACT II limits for NOx while firing on coal, due to the boiler arrangements, including but not limited to the type of burners and combustion chamber design. Significant modifications to Boilers #2 and #3 would need to occur in order to meet the presumptive RACT coal-based emission limits in the interim. Since there was no intent to continue long-term operation using coal and the fuel conversions to natural gas are fully underway, the facility cannot employ such modifications as a practical matter.

Question #4 - No cost estimate should include PA sales tax as PA exempts sales tax on any air pollution control equipment. See 61 Pa Code 32.32 (a)(2)(ii).

Response #4: These charges have been eliminated from the cost effectiveness calculations. The revised cost effectiveness results have been provided (attached).

Question #5 - In section 6 of the facility's proposal, the facility identifies RACT for Boilers 1 and 2 as the same as was determined for BAT in the August 2015 study, and for Boiler 3 RACT was determined to be the shutdown of the unit and installation of a new package boiler. The facility should identify specific emission limits that will be RACT for these units, not just installation of natural gas with controls or shutdown of the unit. In addition, the date of the shutdown should be in an enforceable permit if it is to become RACT. The facility also determined RACT for the Flue Gas Holder to be operation within manufacturer's/facility specifications and good engineering

practices; please specifically identify the practices that will approved into the SIP.

Response #5: As indicated in question #3, the boilers have been permitted to permanently cease operation using coal. The schedule for these conversions/shutdowns has been provided as part of the Plan Approval application, as well as extensions and updates to the Plan Approval (#42-001C) and reflected in the response to Question #3 above.

The Plan Approval emission limits for operation of these boilers on natural gas are more stringent than the presumptive RACT II requirements (25 PA Code 129.97(g). Therefore, the Plan Approval limits should be incorporated as RACT.

Emission Source	Fuel	NOx Emission Limit
Boiler #1 and #2	Natural gas	0.036 lbs./MMBTU each

A positive pressure nitrogen blanket is always maintained on the flue gas holder, which minimizes and/or prevents volatilization of organic compounds. This is the good operating practice for the flue gas holder.

If you have any further questions, please contact me.
Sincerely,

Dan Goldsmith
Environmental Manager

Attachment A
Vendor Quote for Wastewater Treatment System Covers

Ultraflote LLC

3640 West 12th Street
Houston, Texas 77008
Phone: 713-461-2100
Fax: 713-461-2213

To	**:**	**AMEC Foster Wheeler**	**Date**	**:**	**10/19/16**
Project	**:**	**Farmers Valley, PA**	**Bid Date**	**:**	**Budget**
From	**:**	**George Gavlik**	**Ref.**	**:**	**UC-40750**

We are pleased to provide this budget quotation for the following equipment:
Ultraflote LLC proposes to furnish and deliver, materials for an **ALUMINUM FLAT PANEL COVERs** with a standard mill finish for the value stated below and based on the following clarifications in conjunction with specification section none and addendum x.

Basin	Qty Est. Man Hr	Diameter/Size	Tank Description	Square Feet	Weight Each
A & B	**2**	**8' x 58'**	**API Separator**	**464**	

ACCESSORIES

- Extruded aluminum flat panel covers with Bi Directional non-skid surface.
- Maximum panel weight: 160#.
- Top of wall mount.
- Panels designed to deflection of L/240.
- Substantially Leak-tight extruded cover.
- Typically 24" sq. std. hatches; FF nozzles; and a standard vent.

BASE PROPOSAL - MATERIALS ONLY, Budget

Total Material Price F.O.B. Job site .....(A & B) $46,400.00 each.

- The estimated Man-hours are based on the productivity of an experienced Ultraflote crew. The installation contractor should consider carefully the productivity of his work force, the site conditions and the construction strategy to be employed when evaluating these estimates.
- Subject to availability, Ultraflote can provide an experienced supervisor at the rate of $1000.00 per day, from portal-to-portal. This rate is based on a five- (5) day at (8) hours per day normal workweek, for a total of forty (40) hours. Should more hours a day or for the week be required, they will be charged at the rate of $ 187.50 per hour. However, it is not recommended to exceed twelve (12) hours per day for efficiency and safe working conditions for a supervisor. In addition, all travel and living expenses will be for the customer's account.

BASE PROPOSAL – INSTALLED, Budget

Total Material Price F.O.B. Job site .....(A & B) $ 58,000.00 each.

- The estimated Man-hours are based on the productivity of an experienced Ultraflote crew. The

installation contractor should consider carefully the productivity of his work force, the site conditions and the construction strategy to be employed when evaluating these estimates.

PURCHASER OF THE FLAT PANEL COVER MAY WANT TO CONSIDER THE FOLLOWING:

- Crane and required rigging for off loading materials.
- Crane for setting of flat panels and trusses (if required).
- Electric service (115 volt/30 amp) for small tool operation.
- Adequate, level dry working area as close as possible to the tank.
- Structure or site modifications other than construction of the Quad-Seal Welded Aluminum Flat Panel Cover are not included in our scope of work.
- Any work of other trades, such as electrical, pipe fitting, painting, ductwork, or miscellaneous metal work (e.g., handrails, platforms, etc.).

PRICING IS BASED AND CONTINGENT UPON:

- Customer is responsible for providing accurate and complete tank/basin measurements, their attachments and accessories, existing or to be installed, and site dimensions, unless otherwise agreed to in writing by Ultraflote. If customer elects, Ultraflote will survey tank/basin or site for additional costs.
- Customer is responsible for providing suitable unobstructed access to the tank/basin and perimeter for the crane, truck and man-lift.
- Ultraflote will not be responsible for:
  - Verifying the tank/ basin's ability to support the cover.
  - Modifications required to the tank/ basin to mount the cover, or modifications required in the field to avoid interference with equipment or appurtenances not defined in the customer's drawings or specifications.
  - The tank/basin coating system damage, or repair thereof, resulting from the installation of the cover, or use of erection equipment, that must be bolted to the wind girder and tank shell.
- The pipe work that penetrates the Flat Panel Cover being routed to avoid interference with its structural members. Ultraflote will provide information to the pipe supplier at time of submittal so he can coordinate his pipe work. Pipe connection/penetrations at the Flat Panel Cover will be made (by others) such that the pipes penetrate the cover surface perpendicularly.

CLARIFICATIONS and EXCEPTIONS:

- Bid validity is 30 days from the date of this quotation, for delivery fourth quarter 2016. Note that prices for aluminum and other metal components in our products are increasing dramatically. These increases could force price adjustments for later purchases and deliveries.
- If the project is specified as tax-exempt, the purchaser must provide Ultraflote with a tax-exempt certificate.
- Unless otherwise stated, prices do not include any taxes, license, bonds or permit fees. All such fees and taxes are for the account of Buyer and shall be paid for by him. If applicable, tax-exempt certificates or resale exemption certificates should be provided.
- Since Ultraflote Corporation is not in charge of the project's schedule Ultraflote is not in a position

to accept any type of liquidated damages.

- Ultraflote cover design based on all walls being level, smooth with no handrails around tank(s). Ultraflote to use Silicone tape for dissimilar materials.
- Ultraflote uses Silicone gasket materials.
- Unless otherwise stated all trusses will be above panel surfaces.
- In order to protect the product all materials will be shipped in one enclosed truck.

TERMS: Ultraflote's Standard Terms and Conditions for the domestic purchase of the Ultradome roof are made a part of this proposal.

DELIVERY:
Based upon current material inventory and space presently available in our schedule, it is estimated that the proposed Flat Cover Roof could be in manufacturing and shipped within 10 to 12 weeks after receipt of your order and approval. Assume 4 to 6 weeks after receipt of complete tank information for approval drawing preparation and submittal. Please contact us if our proposed delivery schedule does not meet your operational requirements.
Should you have any questions please feel free to call the under signed at 713-581-7841.

Respectfully,

George Gavlik
Sales Manager