IN THE COURT OF COMMON PLEAS 9 25 M 195 LUCAS COUNTY, OHIO

STATE OF OHIO, ex rel.

CASE NO. 95-1037

BETTY MONTGOMERY,

JUDGE

Plaintiff,

ASSIGNED TO JUDGE KNEPPER

vs.

SUN COMPANY, INC. (R&M)

Defendant.

CONSENT ORDER

The Complaint in the above-captioned case having been filed herein, and the Plaintiff, State of Ohio, by its Attorney General, Betty Montgomery (hereinafter "Plaintiff") and the Defendant Sun Refining and Marketing Company (hereinafter "Sun" or "Defendant") having consented to the entry of this Consent Order;

NOW, THEREFORE, without trial of any issues of law or fact, without admission of liability of any kind, and upon consent of the parties hereto, it is hereby ORDERED, ADJUDGED and DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter herein, pursuant to R.C. Chapter 3704. and the rules adopted thereunder. The Complaint states a claim upon which relief can be granted against the Defendant. This Court has jurisdiction over the parties hereto. Venue is proper in this Court.

II. PERSONS BOUND

2. The provisions of this Consent Order shall apply to and be binding upon the Defendant, its agents, officers, employees, assigns, and successors in interest. The provisions of this Consent Order shall also apply to those in active concert or participation with Defendant who receive actual notice of this Consent Order, whether by personal service or otherwise. Defendant shall provide a copy of this Consent Order to any consultants and/or contractors who will perform any work pursuant to this Consent Order. Defendant shall also provide a copy of this Consent Order to all management employees who are responsible for Defendant's compliance with the air pollution laws.

III. SATISFACTION OF LAWSUIT

- 3. Plaintiff alleges in its Complaint that Defendant violated various sections of Ohio Revised Code Chapter 3704. and the rules adopted thereunder at its facility located at 1819 Woodville Road, Toledo, Ohio ("facility").
- 4. Compliance with the terms of this Consent Order shall constitute full satisfaction of Defendant's civil liability to Plaintiff for all claims alleged in the Complaint, and for the specific violations alleged in the notice of violation ("NOV") letters which are attached to this Consent Order as Appendix I.
- 5. Nothing in this Order shall be construed to limit the authority of the State of Ohio to seek relief for claims not contained in Plaintiff's Complaint and the violations in the NOV letters in Appendix I, including violations or conditions which occur after the filing of the Complaint.

IV. CIVIL PENALTY

6. Defendant shall pay to the State of Ohio a civil penalty in the amount of two hundred two hundred thousand dollars (\$200,000.00) within thirty (30) days of the filing of this Consent Order. This penalty shall be paid pursuant to R.C. §3704.06. Payment shall be made by tendering a

Administrative Assistant, or his successor at 30 East Broad Street, 25th Floor, Environmental Enforcement Section, Columbus, Ohio 43266-0410.

Said checks shall be made payable to the "Treasurer of the State of Ohio".

V. INJUNCTION

- 7. Defendant is enjoined and ordered to properly operate and maintain its amine Claus sulfur recovery unit (SRU), source number P012, in compliance with O.A.C. 3745-18-54(O)(10), pursuant to the test methods and monitoring requirements set forth in paragraphs 13 through 16, below.
- 8. During each bi-annual inspection of the SRU's boilers, Sun is ordered and enjoined to comply with O.A.C. 3745-15-06(D), including but not limited to, making a demonstration at least thirty (30) days prior to each inspection that all feasible interim control measures will be taken to reduce emissions in excess of O.A.C. 3745-18-54(O), as set forth in O.A.C. 3745-15-06(A)(3)(f). As part of this demonstration, Sun is ordered and enjoined to submit a modeling study to the Ohio EPA in accordance with the protocol attached hereto as Appendix II, which demonstrates that

the shutdown will not result in any violations of the National Ambient Air Quality Standards ("NAAQS").

- 9. Sun is ordered and enjoined to comply with O.A.C. 3745-15-07.
- 10. Sun is ordered and enjoined to comply with all terms and conditions of the permits to operate (PTO's), and any subsequent renewals or modifications of these PTO's, for the following sources: Sun's process heaters, source numbers B048, B050, and B051; and Sun's SRU, source number P012.
- 11. Defendant is ordered and enjoined to properly operate and maintain the continuous emissions monitoring system ("CEMS") for the process heaters, source numbers B048, B050 and B051, and provide valid readings of hydrogen sulfide emissions from these sources on a continuous basis in accordance with those sources' PTO's and 40 CFR 60.105(a)(12).
- 12. Sun is hereby ordered and enjoined to no longer burn oil in the following sources: B004, B006, B008 and B048. Within thirty (30) days of the filing of this Consent Order, Sun shall submit a request to the Director of Environmental Protection ("Director") for a revision to the portion of O.A.C. 3745-18-54(O) relating to those sources and the simultaneous

operation of Ohio EPA source numbers B006, B008, and B010.1 Until the Director acts upon Sun's request for a revision to 3745-18-54(O)(8), Sun is authorized to simultaneously operate source numbers B006, B008, and B010, as long as those sources are not fired with oil.

- 13. As expeditiously as possible, but in no event later than 300 days of the filing of this Order, Sun is ordered and enjoined to install a sulfur dioxide (SO₂), CEMS for the SRU capable of recording emissions in the units set forth in O.A.C. 3745-18-54(0)(10), for the purpose of determining compliance with that rule according to the methods and procedures set forth in paragraph 16, below.
- 14. Within 90 days after the CEMS referenced in the preceding paragraph is operational, Sun is ordered and enjoined to conduct a performance specification test of the CEMS in accordance with PST 6 of 40 CFR Part 60, App B. Sun is ordered and enjoined to report the results of this performance specification test to the Ohio EPA at least 30 days after conducting the test. The results of the relative accuracy portion of PST 6 shall be reported in both parts per million ("PPM") and standard units. The purpose of this test is merely to determine the accuracy of the

¹The parties hereby agree that heater number H-507 as referenced in O.A.C. 3745-18-54(O)(10) corresponds to Ohio EPA source number B010.

CEMS, and is not to be construed as subjecting the SRU to the new source performance standards ('NSPS"), set forth in 40 CFR Part 60.

- 15. Although source P012 is not subject to the provisions of 40 CFR Part 60, Appendix F, the Director has determined in accordance with R.C. §3704.03(I), that Sun must operate and maintain the CEMS for the SRU in accordance with 40 CFR Part 60, Appendix F in order to provide valid readings of sulfur dioxide emissions on a continuous basis as will be required in the PTO for source P012. Therefore, Sun shall submit a plan identifying the procedures for obtaining valid readings as outlined in the previous sentence, using section 3 of Appendix F as a guideline together with an implementation schedule, within one hundred twenty (120) days after the CEMS is operational. Upon approval, Sun is ordered and enjoined to comply with the approved plan.
- 16. Beginning at the end of the calendar quarter in which the CEMS for the SRU is operational, Sun is ordered and enjoined to submit quarterly excess emission and data assessment reports to the Toledo Division of Environmental Services, as agent for the Ohio EPA by February 1, May 1, August 1, and November 1 of each year detailing the data obtained for the CEMS of the SRU during the previous quarter. Each quarterly report shall document: (a) SRU availability consistent with the requirements of Order

no. 10 of the April 26, 1988 Findings and Orders, notwithstanding the revocation of the April 26, 1988 Findings and Orders; (b) all instances of daily SO₂ values in excess of the limitation specified in O.A.C. 3745-18-54(0)(10); and (c) data assessment. This paragraph does not supersede the time schedules listed in paragraphs 13 through 15, above.

- 17. Within one hundred eighty days (180) of the entry of this Consent Order, Defendant is ordered and enjoined to submit to the Ohio EPA for review and approval a Preventative Maintenance Malfunction and Abatement Plan ("PMMAP") for the SRU meeting the requirements of O.A.C. 3745-15-06(D)(1).
- 18. The Ohio EPA agrees to conduct a completeness review of the PMMAP, and if determined to be incomplete, notify Sun either prior to, or simultaneously with, issuing a notification of deficiency. If the Ohio EPA notifies Defendant that part or all of the PMMAP is deficient, then the Defendant shall resubmit the deficient portions in approvable form to the Ohio EPA within sixty (60) days of Ohio EPA's notification of deficiency. The Ohio EPA may issue an approval of the PMMAP with additional terms and conditions, so long as the Ohio EPA has previously issued Sun a notification of deficiency, and Sun has been provided thirty (30) days to respond to the notification of deficiency. In the event that the Ohio EPA

issues an approval of the PMMAP, with additional terms and conditions, Sun will have the right to challenge the reasonableness and lawfulness of the additional terms and conditions before the Ohio Environmental Board of Review, pursuant to R.C. §3745.04.

- 19. Upon Ohio EPA's approval, Defendant is ordered and enjoined to implement and comply with the PMMAP. In addition, nothing in this Consent Order shall relieve the Defendant from the obligation to comply with the requirements set forth in O.A.C. 3745-15-06.
- 20. Within 120 days after the CEMS for the SRU is operational, Sun is ordered and enjoined to resubmit an application for a permit to operate Sun's SRU that is approvable by meeting the requirements of O.A.C. 3745-35-02.
- 21. Defendant is ordered and enjoined to comply with R.C. Chapter 3704., the rules adopted thereunder, and any orders or permits issued pursuant to that Chapter.

VI. RIGHT OF ENTRY

22. Nothing in this Consent Order limits Plaintiff's authority under R.C. Chapter 3704 or any other statutory authority to determine

compliance with this Consent Order and R.C. Chapter 3704. at the Sun Facility.

VII. TERMINATION

23. No earlier than three (3) years from the date of entry of this Consent Order, Sun may move the Court, pursuant to Rule 60(B) of the Ohio Rules of Civil Procedure, to terminate this Consent Order if Sun can demonstrate that it has been in compliance with the obligations of this Consent Order for such a three (3) year period. The Plaintiff takes no position at this time as to such motion and reserves any rights it may have to oppose the motion including the basis that three (3) years is, in actuality, not an appropriate time period.

VIII. COMPLIANCE WITH APPLICABLE LAWS

24. Nothing herein shall affect Defendant's obligation to comply with all applicable federal, state, or local laws, regulations, rules, or ordinances. Defendant shall obtain all federal, state, or local permits necessary to comply with this Consent Order.

IX. GENERAL PROVISIONS

25. Unless specified otherwise, all documentation required to be submitted to the Ohio EPA pursuant to this order shall be submitted by the Defendant to the following designated individuals, or their respective successors:

Tom Rigo, Manager
Field Operations Section
Division of Air Pollution Control
Ohio Environmental Protection Agency
1800 WaterMark Columbus, Ohio 43266-0149

and

William Garber
City of Toledo
Division of Environmental Services
International Park
26 Main Street
Toledo, Ohio 43605

- 26. Sun has entered into this Consent Order for the expressed and sole purpose of settling the State's claims, as set forth in the State's Complaint. In doing so, Sun does not admit and expressly denies any allegation of violation of Ohio law.
- 27. All costs of this action shall be assessed against the Defendant.

28. This Court shall retain jurisdiction of this matter for the purpose of enforcing this Consent Order.

JUDGE, COURT OF COMMON PLEAS LUCAS COUNTY

APPROVED:

BETTY MONTGOMERY ATTORNEY GENERAL OF OHIO

TERRENCE S. FINN (0039391)
Assistant Attorneys General
Environmental Enforcement
Section
30 East Broad St., 25th Flr.
Columbus, Ohio 43266-0410

Attorney for Plaintiff State of Ohio

(614)466-2766

Fuller & Henry

One SeaGate, 17th Floor Toledo, Ohio 43603

Attorney for Defendant Sun Company, Inc.

By:

Authorized Representative

Sun Company, Inc.

APPENDIX I

OHIO ENVIRONMENTAL PROTECTION AGENCY / DIVISION OF AIR POLLUTION CONTROL APPROVAL OF THE SO₂ DISPERSION MODELING PROTOCOL FOR THE SUN TOLEDO REFINERY SRU PLANNED SHUTDOWN PERIODS.

- 1. The modeling protocol described in the accompanying documents and further clarified by these terms and conditions is approved for the purpose of evaluating the ambient SO₂ impact due to the routine, planned shutdown of the SRU for inspection and maintenance. This approval shall be subject to the following terms:
 - a. The modeling shall be used to support only the planned SRU shutdown for routine inspection and maintenance.
 - b. The Ohio EPA Division of Air Pollution Control or Sun Refining and Marketing Company (Sun) may raise proposed changes to this protocol. Any future change to the protocol must be agreed upon by both parties.
- 2. From the undated document titled: "ACCEPTABLE MODIFICATIONS TO THE ISC MODEL TO...PREDICT SRU TURNAROUND IMPACTS":
 - a. Only the scheduled shutdown dates plus a two week period on either side of the shutdown must be analyzed.
 - b. Flare plume rise from SCREEN incorporated into ISC model. Sun shall document which sources use the modified plume rise and how the modification is incorporated.
 - c. For the modeling period, the maximum non-impacted concentration from the most recent valid monitoring data year will be added as a background to the respective modeling period high second high modeled concentration.
 - d. Combined buoyant and momentum plume rise can be applied to source emissions that exhibit both components. Sun shall document which sources use combined plume rise and how it is incorporated.
 - e. Urban Rural Sector Analysis. Receptors in the 22.5 degree sectors centered on the following directions shall be modeled using Urban Mode: N, NNE, NE, ENE, WNW, NW, and NNW. The remaining sectors shall be modeled using Rural Mode.
 - f. Meteorological data: Sun shall use the most recent 5 years of meteorological data available.
 - g. Combined sources: Sun shall document the sources and source parameters that were combined and shall demonstrate that the resulting combined source is more conservative than the individual sources (i.e., that worst-case values are

used for each parameter).

3. From the October 18, 1991, letter from Elaine M. Moore, Sun, to Robert F. Hodanbosi, Ohio EPA: Sun may incorporate partial penetration of the plume through the thermal boundary layer using the modified Briggs method in the manner of the CTDM Plus Model. Sun shall document any revisions to the model code to incorporate this (or any other) model modification.

JT/sunmodel.doc



Sun Refining and Marketing Company P O Box 920 Toledo OH 43693-0920 419 698 6600

July 3, 1991

Mr. Robert F. Hodanbosi P.E., Manager Air Quality Modeling & Planning Division of Air Pollution Control Ohio Environmental Protection Agency P.O. Box 1049
1800 Watermark Drive Columbus, OH 43266-0149

Dear Mr. Hodanbosi:

This letter is in follow up to the meeting of June 14, 1991, with Sun Refining and Marketing Company ("Sun") to discuss the dispersion modeling protocol for predicting ambient air quality impacts during Sulfur Recovery Unit (SRU) boiler shutdowns. Representing Sun at the meeting was Larry Clere, Luis Comas, and myself. Also present was Dr. Ashok Kumar from The University of Toledo who is Sun's consultant for the project. Dr. Kumar has reviewed the original modeling that was performed by Trinity Consultants, Inc. and proposed several modifications to that study that would improve prediction accuracy.

The additional information that was requested at the meeting is submitted with this letter. Upon approval, these points will be incorporated into the modeling protocol to demonstrate the ambient air quality impacts of Sun's proposed control plan during SRU shutdowns due to boiler inspections. Sun's final control plan will demonstrate maintenance of NAAQS during these periods.

The proposed modifications are:

1. The period to be studied should only be the time period when the SRU is actually scheduled to be shut down. The purpose of the study is to examine scheduled shutdowns lasting two weeks, not short-term malfunctions or unplanned shutdowns of the SRU that typically last less than 72 hours.

Response: Examining only the actual dates of the scheduled shutdown is allowed. Sun will examine a two week period on either side of the scheduled shutdown as well.

2. The modeling protocol should reflect the additional plume

rise due to flaring. The existing study only includes plume height due to the height of the flare stack and plume rise from buoyancy effects. The U.S. EPA SCREEN model currently includes calculations for the additional plume rise due to flaring and that algorithm would be added to the ISCST model. As an alternative, the plume rise effects could be calculated by hand and added to the existing modeling study.

Response: Calculating the additional plume rise due to flaring is allowed. Sun will incorporate the SCREEN flaring algorithm for additional plume rise due to flaring into the ISCST model.

3. Use of background concentration monitoring data should also be limited to the period when the SRU is shut down. Also, the average non-impacted background concentration, not the highest non-impacted background concentration should be used as more accurately representing typical background concentrations. Average background concentrations are generally used in dispersion modeling studies.

Response: Limiting the use of background data to the period when the SRU is shut down (including the two week period on either side of the scheduled dates) is allowed. Ohio EPA expressed a preference for the maximum non-impacted background concentration. The SIP was set using maximum emission rates and already allows one exceedance per year. The use of the second-highest non-impacted background concentration or the 95% confidence level will be considered.

Additional Information: Use of the average background concentration should be allowed. Average background concentrations are generally used in dispersion modeling studies, including SIP development work. In fact, this approach was used in calculating area source contributions in The Toledo Edison Company SIP revision request that was prepared by Enviroplan, Inc., "The Impact on Air Quality of Revising the Ohio State Implementation Plan for Sulfur Dioxide at the Bay Shore, Acme, and Water Street Stations of The Toledo Edison Company" (August 30, 1979). On page 2-23, it states "Unlike point sources, area source emissions were computed using average, rather than maximum operating rates." The two monitoring stations maintained by Ohio EPA in Lucas County provide monitoring data that are used to represent other point and area sources in Lucas County as an area source. If the Enviroplan methodology is followed, the average value would be used as the representative background concentration. Since this approach has already been approved by U.S. EPA Region V and Ohio EPA, it should be allowed here as well.

Also, in the 1979 Enviroplan study, a number of sources were modeled that have since been shut down. These include the Gulf refinery, Phillips Petroleum carbon black plant, Toledo Edison Water Street Station, the North Cove Jeep Plant, Allied Chemical, and the LOF East Broadway Plant. Some of these sources had substantial SO₂ emissions. Therefore, today's SO₂ emissions are much lower than they were at the time of the 1979 Enviroplan study and it is even more unlikely that there would be an exceedance of NAAQS when Sun is operating under permitted conditions, especially considering that the U.S. EPA models are known to produce conservative values.

4. The mixing height data generated by RAMMET for ISCST is unrealistically high during nighttime conditions. Physically, during fall, winter, or spring there is very little heat flux during nighttime. The corrections to the mixing heights would be made by either using analytical solution techniques for calculating mixing heights from heat flux data or assigning a nighttime mixing height of 30 to 50 meters.

Response: Additional support information must be submitted to Ohio EPA regarding this approach before it can be approved.

Additional Information: There are several options to correct unrealistically high mixing heights during nighttime conditions. The preferred method is to follow the procedure in the paper by Kumar, A. and S. G. Djurfors, "A Model to Predict Violation of Clean Air Regulations" (1978). A copy of the paper is included with this submittal. The equation for thermal boundary layer development with the time of day is shown on page 283. Equation (7) would be used with typical heat flux values and mixing heights would be calculated for each month.

If this procedure is not acceptable to Ohio EPA, Sun will conduct a literature review to determine what other methods or procedures are available for calculating nighttime mixing heights and submit them to Ohio EPA for approval. Alternatively, a nighttime mixing height could be assigned to the data.

In all cases, unlimited mixing will be used for concentration calculations in combination with this approach.

5. The ISCST model allows for either momentum plume rise or buoyant plume rise. It cannot calculate the total plume rise for sources that have both a momentum component and a buoyant component. For the flare, ISCST is calculating

the buoyant plume rise component based on the large temperature differential between the flare release and atmospheric conditions. The correction would be made by adding the momentum component to the plume rise equations. The combined equations for buoyant plume rise and momentum plume rise will be based on the work of Briggs and others. (The ISCST building wake effects subroutine does include both components, although the change has not yet been made for the plume rise calculations.)

Response: Ohio EPA will investigate how ISCST calculates plume rise to confirm that the momentum component is not included. If that is true, use of the combined equations will be allowed.

6. Performing a land use census using the Auer techniques approved by U.S. EPA shows that the area around the refinery is over 50% rural. Sun should be allowed to model that percentage using rural coefficients. The correction would be made by either combining rural and urban dispersion coefficients or by performing a sector analysis and modeling the urban sectors as urban and the rural sectors as rural.

Response: Combining rural and urban dispersion coefficients is not acceptable. Ohio EPA will consider the use of a sector analysis. More information needs to be submitted by Sun on how this approach would work.

Additional Information: It is Sun's understanding that the U.S. EPA CTDM model incorporates a sector analysis into the model for specifying dispersion coefficients. The CTDM approach will be reviewed. At this time, the following approach is suggested:

- (a) Use Auer techniques and topographic maps to define rural and urban areas as a function of downwind distance and sector.
- (b) Use appropriate dispersion coefficients depending on the type of area seen by the plume.
- (c) Modify ISCST to implement this approach.
- 7. The use of an inclined plume model should be considered for this study. This would more accurately represent the actual plume configuration during the release.

Response: More information needs to be submitted to Ohio EPA regarding this approach before it can be approved.

Additional Information: The inclined plume model will combine a numerical plume rise model (i.e. the variation

of plume rise with downwind distance will be incorporated during modeling) and the gaussian plume model in ISCST. The matching will be at the point of maximum rise.

8. The ISCST model does not allow for plume penetration through the thermal boundary layer. CRSTER, another U.S. EPA regulatory model, allows for either full penetration or no penetration. To most accurately represent actual atmospheric conditions, the use of both full and partial penetration should be allowed. The analysis would be performed using modified Briggs equations.

Response: Ohio EPA will examine how the CRSTER model handles plume penetration and consider its use. Additional information on how plume penetration would be handled should be submitted.

Additional Information: The plume penetration through the thermal boundary layer will be examined as follows:

- (a) The CRSTER model techniques will be used to determine if there is full penetration or no penetration.
- (b) Partial penetration will be calculated based on the work of Briggs (1975), Manins (1979), Kumar and Djurfors (1978), and Weil and Brower (1984). All these approaches are similar. Equation (12) in the paper by Kumar and Djurfors (1978) will be used to compute partial penetration. This approach has already been used in the UTLRT and the WDLRT models that were developed for the Ohio Air Quality Development Authority.
- 9. Background concentrations should be examined according to atmospheric stability classifications. These stabilities should be matched with the stability shown during the limiting hours in order to calculate a more accurate total concentration.

Response: Ohio EPA will allow matching background data with stability classifications, but questioned whether or not it was possible given the limited amount of data. The analysis will be easier to implement for 3 hour background data than for 24 hour. Sun will examine the background data and implement this approach if possible.

Sun agreed that five years of meteorological data will be used for the study. The years 1973 - 1977 are acceptable to Ohio EPA. Ohio EPA prefers the years 1983 - 1987 be used, if available. Sun will attempt to locate the later data.

Sun is requesting that this information be reviewed as expeditiously as possible. As you are aware, we have tight

deadlines from the Ohio Attorney General's Office, and need to resolve these issues as quickly as possible. In addition, we are available to meet with you and your staff to discuss any of the specific points in this letter.

If you have any questions or need additional information, please contact me at (419) 698-6847.

Very truly yours,

Elaine M. More

Elaine M. Moore Environmental Engineer

Attachments

cc: Terry Finn, Ohio Attorney General's Office Patricia Walling-Miller, Ohio EPA Jim Orlemann, Ohio EPA

> L. T. Clere L. A. Comas T. S. Stammel



Sun Refining and Marketing Company POBox 920 Toledo OH 43693-0920 419 698 6600

July 29, 1991

Mr. Robert F. Hodanbosi P.E., Manager Air Quality Modeling & Planning Division of Air Pollution Control Ohio Environmental Protection Agency P.O. Box 1049 1800 Watermark Drive Columbus, OH 43266-0149

Dear Mr. Hodanbosi:

This letter is in follow up to the meeting of July 19, 1991, with Sun Refining and Marketing Company ("Sun") to provide further discussion on the dispersion modeling protocol for predicting ambient air quality impacts during Sulfur Recover Unit (SRU) boiler shutdowns. Present at the meeting were:

Larry Clere - Sun Luis Comas - Sun Elaine Moore - Sun

Ashok Kumar - The University of Toledo, Sun's consultant

Tom Tucker - Ohio EPA Bob Hodanbosi - Ohio EPA

Additional information was provided during the meeting on some of the points that were listed in the July 3, 1991, letter.

Please note that the highlighted sections are supplemental pieces of information given to Larry Clere (Sun) by Robert Hodanbosi (OEPA) during a phone conversation, July 26, 1991. Sun's responses to the additional information have been included.

Use of Background Concentrations

Additional information was provided to Ohio EPA regarding the use of the average background concentration as the most representative value. One point mentioned was that the CRSTER model was originally validated by comparing average concentrations with the predicted values. In fact, all the modeling validation studies were performed using average background concentrations. Sun was also concerned about effects on the monitor from sources located in Michigan and localized

downwash effects.

After this information was presented, Ohio EPA still expressed a preference that the highest non-impacted background concentration be used with the high second-highest modeled concentration. Alternately, the second highest background concentration could be used with the highest modeled prediction. Sun prefers that the first combination be used. Also, 1990 monitoring data will be used as the most recent data available.

Use of More Realistic Nighttime Mixing Heights

The nighttime mixing heights generated by RAMMET are unrealistically high. In fact, nighttime mixing heights of 980 meters are generated by RAMMET in October. Based on our knowledge of heat flux values in Northern latitudes, this is not physically realistic. More discussion was provided to Ohio EPA on how the mixing height corrections would be made. Additionally, a need to look at the atmospheric conditions was discussed.

Ohio EPA's primary concern was whether or not there were any physical data to support the changes. Ohio EPA will discuss this point with the staff meteorologist and make a determination as to how this could be incorporated into the model.

NOTE: As per the July 26, 1991 telephone conversation, Robert Hodanbosi initially rejected any modifications to mixing heights protocol. Larry Clere requested further evaluation due to the discrepancies between calculated values and the "true" physics. Robert Hodanbosi agreed to continue the evaluation.

SUN'S RESPONSE: Sun will continue to investigate the issue and submit its finding to the OEPA.

Combining Momentum and Buoyant Plume Rise

Ibblusy

The portion of the ISCST source code pertaining to plume rise was examined and it was agreed that ISCST doe not allow sources with both momentum and buoyant plume rise to compute both terms. Sun's flare is a source that clearly has both momentum and buoyant plume rise effects. The combined equations have been solved and would be used in the modeling study. Ohio EPA will provide further evaluation on how this point would be incorporated into the study.

NOTE: As per the July 26, 1991 telephone conversation, Robert Hodanbosi is in agreement to allow use of momentum and buoyancy factors in the modeling study.

Use of Mixed Urban/Rural Dispersion Coefficients

Ohio EPA has allowed the use of a-sector analysis in other

modeling applications. One example is around the Zimmer Plant near Cincinnati where urban sectors were modeled as urban and rural sectors were modeled as rural. Sun is also investigating other approaches for defining urban and rural regions that may be acceptable to Ohio EPA.

Ohio EPA is willing to allow the use of urban and rural dispersion coefficients, as appropriate, since this is not SIP development work. Before any modeling is performed, Sun must submit the proposed plan to Ohio EPA for approval. Ohio EPA would not allow this approach for future SIP development work.

Use of an Inclined Plume Model

Sun requested permission to use an inclined plume model in the initial plume rise stages. The plume would then be matched with the gaussian model at the point of maximum rise. The concept was explained in more depth to Ohio EPA.

Ohio EPA will need more information to evaluate this request, which would include an analysis of what the impacts would be on the modeling.

NOTE: As per the July 26, 1991 telephone conversation Robert Hodanbosi denied permission to use an inclined plume model in the initial plume rise stages.

SUN'S RESPONSE: Sun will continue to investigate the issue and submit its finding to the OEPA.

Use of Full and/or Partial Penetration

It was confirmed that the CRSTER model does allow the use of full or no penetration. Ohio EPA agreed that full penetration could be used. Sun also requested that the use of partial penetration be allowed. The equations that would be used were discussed with Ohio EPA. Ohio EPA requested copies of the papers that were cited in the July 3 letter but not provided. There was support for the general concept of partial penetration because of the source that is being modeled. Ohio EPA will evaluate the proposed method to be used to compute partial penetration and make a determination.

NOTE: As per the July 26, 1991 telephone conversation, Robert Hodanbosi disagrees with the use of partial penetration in the modeling study.

SUN'S RESPONSE: It is our understanding that partial penetration is allowed in CTDM Plus model using a modified Briggs method (Supporting document included). As a result we request your reconsideration of the denial to use partial penetration in the modeling study.

Combining Minor Sources to Reduce Computer Time

Sun requested approval for combining all the minor sources and modeling as an equivalent source using a technique published in another paper. Ohio EPA agreed that the gas fired heaters could be combined but required that the four largest sources be kept separate. This would allow Sun to model seven sources instead of 32. Sun will submit the paper describing the technique.

Conclusions

Sun mentioned that there is a tremendous time pressure to get approval for the modeling protocol because of the Attorney General's Office involvement. Ohio EPA felt that their evaluations could be completed within four weeks after all the information is received. They will review the information as it is submitted. Sun is proceeding to implement those points that have already been approved.

Although we are proceeding with only the accepted changes, we will continue to investigate and submit additional information supporting our original points.

Enclosed are copies of the reference articles describing some of the techniques proposed by Dr. Kumar for developing a realistic dispersion model protocol. The following copied articles are included:

- 1) Ahmad, Bou-Hamra, <u>Development of a New Long Term Multiple-source Plume Model: Application in some Industrial and Residential Areas in Kuwait.</u>
- 2) Kumar, Thomas, <u>Computation of Ground-Level Concentrations at Coastal Sites.</u>
- 3) Kumar, Thomas, <u>Simulation of Long Range Transport of NOx Using WDLRT.</u>
- 4) Manins, <u>Partial Penetration of an Elevated Inversion Layer</u> by <u>Chimney Plumes</u>.
- 5) Thomas, UTLRT: A Statistical Long Range Transport Model
- 6) Weil, Brower, An <u>Updated Gaussian Plume Model for Tall Stacks</u>

As we indicated during the meeting, the October, 1991, shutdown has been rescheduled for the Spring of 1992. The Sulfur Recovery Unit boiler biennial inspection will be conducted at that time.

If you have any questions or need additional information, please contact me at (419) 698-6847.

Very truly yours,

Elaine M. Moore Environmental Engineer

Terry Finn, Ohio Attorney General's Office/ w/o attachment Patricia Walling-Miller, Ohio EPA Jim Orelemann, Ohio EPA

L. T. Clere

L. A. Comas

A. Kumar, UT

T. S. Stammel

L. E. Tosi



October 18, 1991

Mr. Robert F. Hodanbosi P.E., Manager Air Quality Modeling & Planning Division of Air Pollution Control Ohio Environmental Protection Agency P.O. Box 1049 1800 Watermark Drive Columbus, OH 43266-0149

Dear Mr. Hodanbosi:

This letter is in follow up to the letters of July 3 and 29, 1991, discussing the specifics of the modeling protocol that will be used by Sun Refining and Marketing Company ("Sun") to predict ambient air quality impacts during scheduled Sulfur Recovery Unit (SRU) boiler inspections at the Toledo refinery. These inspections occur every two years.

Sun's consultant, Dr. Ashok Kumar of The University of Toledo, proposed several modifications to the ISCST model that would more accurately represent actual conditions during the scheduled shutdown. Some of the proposed modifications have been accepted by Ohio EPA as appropriate for incorporation into this modeling study, while others would need more evaluation before they could be accepted by Ohio EPA. Sun is proceeding with those model modifications previously agreed to.

Sun is in agreement to incorporate only those modifications which have been allowed by Ohio EPA. However, in the July 29, 1991, letter, Sun requested that one proposed modification be reconsidered for approval by Ohio EPA. Sun requested to be allowed to incorporate the use of partial penetration of the plume through the thermal boundary layer. Although physically, partial penetration can occur during a flare release depending on atmospheric conditions, U.S. EPA has not yet incorporated this concept into the ISCST model.

Initially, Ohio EPA denied the use of partial penetration because Sun was unable to show that U.S. EPA has previously allowed its use. Since that time, Sun has discovered that U.S. EPA has incorporated the concept in the CDM Plus model by using a modified Briggs method. The support documentation was submitted with the July 29 letter. Based on this additional information, Sun feels that the concept should be allowed in this study.

Sun is proceeding with implementing all the other modifications that have been agreed to and is expecting to have final results by December 1, 1991. However, Sun has not heard from Ohio EPA regarding the use of partial penetration taking into account this additional information. Sun respectfully requests that this issue be reconsidered and approved by Ohio EPA. This final issue needs to be resolved as soon as possible in order to address outstanding issues with the Ohio Attorney General's Office.

Thank you for your consideration in this matter. If you have any questions or need additional information, please contact me at (419) 698-6847.

Very truly yours,

Claine M. More

Elaine M. Moore Environmental Engineer

cc: Terry Finn, Ohio Attorney General's Office Patricia Walling-Miller, Ohio EPA Jim Orlemann, Ohio EPA

L. T. Clere

L. A. Comas

A. Kumar, UT

T. S. Stammel, 17/10PC

L. E. Tosi, Fuller & Henry



November 1, 1991

Mr. Robert F. Hodanbosi P.E., Manager Air Quality Modeling & Planning Division of Air Pollution Control Ohio Environmental Protection Agency P.O. Box 1049
1800 Watermark Drive Columbus, OH 43266-0149

Dear Mr. Hodanbosi:

Enclosed are the results of the urban/rural sector analysis that was performed by Dr. Ashok Kumar for the area around Sun Refining and Marketing Company's Toledo refinery. The procedure used is the same as the one used in the U.S. EPA model CTDM Plus. The area around the refinery was divided into 22.5° sectors corresponding to the major wind directions. Then, using the results of the Trinity Consultants, Inc. Auer analysis, each sector was examined to determine the percentages of urban and rural areas. Sectors with over 50% urban areas were classified as urban; sectors with less than 50% urban areas were classified as rural according to the agreement reached with Ohio EPA.

Most of the sectors are clearly urban or rural. However, the ENE region is only 49.11% urban, which according to the agreement, would be classified as rural. However, Sun will also model that sector as urban. By changing the ENE region to urban, 43% of the area around the refinery will be modeled as urban. This compares very favorably to the Trinity analysis, which classified the area around the refinery as 40% urban.

The following sectors will be modeled as urban: North, North Northeast, Northeast, East Northeast, West Northwest, Northwest, and North Northwest. The remaining sectors will be modeled as rural. The support documentation is enclosed.

If you have any questions or need additional information, please contact me at (419) 698-6847.

Very truly yours,

Claire M. More

Elaine M. Moore Environmental Engineer

Enclosures

cc: Terrence Finn, Ohio Attorney General's Office Patricia Walling-Miller, Ohio EPA James Orlemann, Ohio EPA

L. T. Clere.

L. A. Comas

A. Kumar, UT

T. S. Stammel, 17/10PC

L. E. Tosi, Fuller & Henry

SULFUR RECOVERY UNIT SHUTDOWN

Dispersion Modeling Analysis

SECTORWISE DEMARCATION OF RURAL AND URBAN AREAS

CALCULATIONS: Area of Sector = .5*R*R*(angle in radians)

= 112*A, where A is the area of one square

Region	Red area	Blue area	Red + Blue	Rest area	% Urban	% Rural	U or R	
N	54.50	2.50	57.00	55.00	50.89	49.11	U	
NNE	54.00	4.50	59.50	52.50	53.13	46.88	ŭ	
NE	48.50	10.00	58.50	53.50	52.23	47.77	ប	
ENE	49.00	6.00	55.00	57.00	49.11	50.89	R (will	model urban)
E	13.00	3.50	16.50	95.50	14.73	85.27	R	
ESE	7.00	23.50	30.50	81.50	27.23	72.77	R	
SE	44.00	2.00	46.00	66.00	41.07	58.93	R	
SSE	6.50	0.00	6.50	105.50	5.80	94.20	R	
S	8.50	10.50	19.00	93.00	16.96	83.04	R	
SSW	11.00	10.00	21.00	91.00	18.75	81.25	R	
SW	38.50	1.50	40.00	72.00	35.71	64.29	R	
WSW	33.00	13.00	46.00	66.00	41.07	58.93	R	
w :	28.00	6.00	34.00	78.00	30.36	69.64	R	
WNW	56.50	5.00	61.50	50.50	54.91	45.09	' ប	
NW	76.00	1.50	77.50	34.50	69.20	39.80	U	
NNW	57.00	1.50	58.50	53.50	52.23	47.77	U	

LEGEND: RED AND BLUE ARE URBAN REST OF AREA IS RURAL

R--->Rural U--->Urban

APPENDIX II

CITY OF TOLEDO OHIO



DEPARTMENT OF PUBLIC UTILITIES
ENVIRONMENTAL SERVICES DIVISION
International Park

26 Main Street
Toledo, OH 43605-2032
(419) 693-0350

Thomas L. Kovacik

Director

Donald M. Moline, P.E. Commissioner

September 22, 1988

Certified Mail

Mr. Larry T. Clere Sun Refining & Marketing Co. P.O. Box 920 Toledo, OH 43693

Re: Notice of Violation

Dear Larry:

On September 16, 1988, John Walthall and I saw excessive visible emissions coming from a stack somewhere in the middle of your plant at 12:00 noon. Mr. Walthall informed me that emissions were 90%+ - ninety percent plus opacity. This visible emissions lasted for at least one hour because we saw the same thing at 1:00 p.m. After initiating contact with your company, Susan Bell, informed me at 4:30 p.m. that your company had a problem in plant number five with boiler number ten.

Enclosed, please find a "Notice of Violation" for Sun Refining and Marketing Company, 0448010246 MP. Please review this document carefully as some action is required on your part.

If you have any questions regarding this matter, feel free to contact me.

Very truly yours,

Jeffery Ridley

Environmental Specilaist

JR/mrh

Enclosure

cc: Donald Moline, Commissioner, ESD
Toledo Environmental Services Division

NOTICE OF VIOLATION

The City of Toledo Environmental Services Division hereby serves notice that:

SUN REFINING AND MARKETING COMPANY P.O. BOX 920 TOLEDO, OHIO 43693

has violated the following environmental laws, orders, rules, or regulations on the indicated dates at the above address.

Dates of Violation(s)

SEPTEMBER 16, 1988

Regulation(s) violated	<u>Description of Source(s) and Violation(s)</u>
DAC 3745-17-07 (A)	STACK TO BOILER#10 IN PLANT#5 HAD PARTICULATE EMISSIONS OF A SHADE OR DENSITY GREATER THAN TWENTY PERCENT OPACITY.
OAC 3745-15-06 (B)	FAILURE TO REPORT A

The above violation(s) may subject the violator to penalties of up to \$25,000 per day per violation. It is possible that a penalty will be assessed in this case. If a penalty is to be assessed, the amount will be determined after your response is reviewed.

Required Actions

Within 14 days of receipt of this Notice of Violation, you shall:

- Abate the violation(s) or provide for an acceptable remedy.
- 2. Reply in writing to this Notice of Violation. The reply shall include:
 - a. description(s) and date(s) of action(s) taken thus
 far to abate the violation(s).
 - b. description(s) and expeditious time schedule of action(s) yet to be taken to remedy the violation(s).
 - c. description(s) of action(s) taken or to be taken to prevent recurrence of the violation(s).

Recommended Remedial Actions

It is recommended that you consider the following suggestions:

REPORT MALFUNCTIONS IN A TIMELY MANNER.

Your written response and any questions regarding this Notice of Violation should be directed to <u>JEFFERY RIDLEY</u> at Toledo Environmental Services Division, 26 Main Street, Toledo, Ohio 43605, or call (419) 693-0350.

October 31, 1988

CERTIFIED MAIL

Linda Furlough
Environmental Engineer
Sun Refining and Marketing Co.
P.O. Box 920
Toledo, Ohio 43693-0920

Re: Notice of Violation

Dear Linda

Enclosed please find a "Notice of Violation" for <u>Sun Refining and Marketing Co.,0448010246.</u> Please review this document carefully as some action is required on your part.

If you have any questions regarding this matter, feel free to contact me.

Very truly yours, William D. Lasber

William J. Garber

Environmental Engineer

WJG

Enclosure

cc: Donald M. Moline, P.E., Commissioner Toledo Environmental Services Division

File / SUN/ NOV File

NOTICE OF VIOLATION

The City of Toledo Environmental Services Division hereby serves notice that:

Sun Refining and Marketing Company P.O. Box 920 Toledo, Ohio 43693-0920

has violated the following environmental laws, orders, rules, or regulations on the indicated dates at the above address.

Dates of Violation(s)

September 29,1988

Regulation(s) violated

OAC 3745-21-09(Z)

<u>Description of Source(s) and Violation(s)</u>

During my inspection of the Sun Refining and Marketing Company refinery, I reviewed documentation which showed that the following tanks had failed their seal inspections:

T009/#163 primary seal
T010/#410 primary seal
T039/#424 primary seal
T053/#155 secondary seal
T058/#139 primary &
secondary
T066/#418 primary seal
T067/#417 primary seal
T068/#416 primary seal

The above violation(s) may subject the violator to penalties of up to 25,000.00 per violation. It is possible that a penalty may be assessed in this case. If a penalty is to be assessed, the amount will be determined after your response is reviewed.

Required Actions

Within 14 days of receipt of this Notice of Violation, you shall:

- 1. Abate the violation(s) or provide for an acceptable remedy.
- 2. Reply in writing to this Notice of Violation. The reply shall include:
 - a. description(s) and date(s) of action(s) taken thus far to abate the violation(s).
 - b. description(s) and expeditious time schedule of action(s) yet to be taken to remedy the violation(s).
 - c. description(s) of action(s) taken or to be taken to prevent recurrence of the violation(s).

Recommended Remedial Actions

It is recommended that you consider the following suggestions:

In the future, when a tank fails a seal inspection, notify the Toledo Environmental Services Division as you would for a malfunction.

Your written response and any questions regarding this Notice of Violation should be directed to <u>William J. Garber</u> at Toledo Environmental Services Division, 26 Main Street, Toledo, Ohio 43605, or call (419) 693-0350.

May 10, 1989

CERTIFIED MAIL

Ms. Linda S. Furlough
Environmental Engineer
Sun Refining and Marketing Co.
P.O. Box 920
Toledo, Ohio 43693-0920

Dear Linda:

The letter dated May 2, 1989, you sent to explain the malfunction that released sulfur dioxide from April 12 through April 21, 1989, was deficient in a fewareas. The letter was due April 26, 1989, as per the Ohio Administrative Code 3745-15-06(b)1 and the malfunction occurred on April 12 (your letter said March 12, 1989). Please provide a follow-up letter to clarify the date and to address the following issues:

- 1. What caused the (FCC unit) to run at partial cooldown from April 12 through April 21, 1989?
- 2. How much excess sulfur dioxide was emitted through the untreated refinery fuel gas during this same time period?
- 3. If the amine unit was back on line on April 18, 1989, why wasn't the sour water stripper gas routed back to (SRU unit) until April 21, 1989?

Because the May 2, 1989, letter was late, enclosed you will find a "Notice of Violation" for Sun Refining and Marketing Company. Please note, also a two month detailed report on this particular malfunction is due June 12, 1989, per OAC Rule 3745-15-06(b)3. Instructions outlined in this Rule must be addressed in detail.

Thank you in advance for your cooperation.

Very truly yours,

Jeff Ridley Environmental Specialist

NOTICE OF VIOLATION

The City of Toledo Environmental Services Division hereby serves notice that:

Sun Refining and Marketing Company
P. 0. Box 920
Toledo, Ohio 43693-0920

has violated the following environmental laws, orders, rules, or regulations on the indicated dates at the above address:

Dates of Violation(s)
April 22 through May 2, 1989

Regulation(s) Violated

1. OAC 3745-15-06(B)(1)

Description of Source(s) and Violation(s)

Failure to submit a written report within two weeks of a malfunction lasting more than 72 hours.

The above violation(s) may subject the violator to penalties of up to \$25,000 per violation. It is possible that a penalty will be assessed in this case. If a penalty is to be assessed, the amount will be determined after your response is reviewed.

REQUIRED ACTIONS

Within fourteen (14) days of this Notice of Violation, you shall:

- 1. Abate the violation(s) or provide for an acceptable remedy.
- 2. Reply in writing to this Notice of Violation. The reply shall include:
 - description(s) and date(s) of action(s) taken thus far to abate the violation(s).
 - b. description(s) and expeditious time schedule of action(s) yet to be taken to remedy the violation(s).
 - c. description(s) of action(s) taken or to be taken to prevent recurrence of the violation(s).
 - d. submit follow-up letter that will address issues as stated in cover letter.

RECOMMENDED REMEDIAL ACTIONS

Your written response and any questions regarding this Notice of Violation should be directed to <u>Jeffery Ridley</u> at Toledo Environmental Services Division, 26 Main Street, Toledo, Ohio, 43605, or call (419) 693-0350.

JHR:mg/esd



CITY OF TOLEDO OHIO

DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF ENVIRONMENTAL SERVICES
INTERNATIONAL PARK
26 MAIN STREET
TOLEDO, OH 43605
(419) 693-0350

Michael J. White
Director

Donald M. Moline, P.E.
Commissioner

March 8, 1990

CERTIFIED MAIL

Mr. Larry T. Clere, Manager Risk Management Department Sun Refining and Marketing Company Toledo Refinery P.O. Box 920 Oregon, Ohio 43693

Re: Notice of Violation

Dear Mr. Clere:

Enclosed please find a "Notice of Violation" for Sun Refining and Marketing Company-Toledo Refining, #0448010246 B006, B008, and B010. Please review this document carefully as some action is required on your part.

If you have any questions regarding this matter, feel free to contact me.

Very truly yours,

Clarence A. Young Engineering Associate

Clarence a Going

CAY:sg/w

Enclosure

cc: Donald M. Moline, P.E., Commissioner-TESD Elaine Moore, Sun Refining

NOTICE OF VIOLATION March 8, 1990

The City of Toledo Environmental Services Division hereby serves notice that:

Sun Refining and Marketing Company Toledo Refinery 1819 Woodville Road Oregon, Ohio 43616

has violated the following environmental laws, orders, rules, or regulations on the indicated dates at the above address:

Dates of Violation(s)

1988 to present

Regulation(s) Violated

1. OAC rule 3745-18-54(0)(5),(8) 40 CFR 52.1881(b)39,XIV,K

Description of Source(s) and Violation(s)

During the calendar years 1988 and 1989, Sun Refining and Marketing Company-Toledo Refinery (Ohio EPA Premise #0448010246) operated heater H-501 and H-503 simultaneously with heater H-507 (Ohio EPA source #8006, #8008, and #8010, respectively). Sun Refining and Marketing Company has continued this operational practice to the date of this document. Simultaneous operation of these sources is a violation of the above Ohio Administrative Code (OAC) and the Code of Federal Regulations.

The above violation(s) may subject the violator to penalties of up to \$25,000 per violation. It is possible that a penalty will be assessed in this case. If a penalty is to be assessed, the amount will be determined after your response is reviewed.

REQUIRED ACTIONS

Within fourteen (14) days of this Notice of Violation, you shall:

- 1. Abate the violation(s) or provide for an acceptable remedy.
- 2. Reply in writing to this Notice of Violation. The reply shall include:
 - a. description(s) and date(s) of action(s) taken thus far to abate the violation(s).
 - b. description(s) and expeditious time schedule of action(s) yet to be taken to remedy the violation(s).

- c. description(s) of action(s) taken or to be taken to prevent recurrence of the violation(s).
- d. submit operating records for Source #8006, #8008, and #8010 for the calendar years 1987, 1988, and 1989. Records should include the time and duration when Sources #8006 and #8008 were operated simultaneously with #8010.

RECOMMENDED REMEDIAL ACTIONS

It is recommended that you consider the following suggestions:

- Burn only refinery fuel gas in Sources #B006, #B008, and #B010 while operating the sources simultaneously until such time corrective action can be taken.
- Keep records of operation for Sources #B006, #B008, and #B010 that include the time and duration when the sources are operated simultaneously.

Your written response and any questions regarding this Notice of Violation should be directed to <u>Clarence A. Young at Toledo</u> Environmental Services Division, 26 Main Street, Toledo, Ohio, 43605, or call (419) 693-0350.

CAY:sg/w

September 19, 1990

CERTIFIED MAIL

Mr. Larry T. Clere
Sun Refining and Marketing
1601 Woodville Road
P.O. Box 920
Toledo, Ohio 43693

Re: Notice of Violation

Dear Mr. Clere:

Enclosed please find a "Notice of Violation" for Sun Refining and Marketing, Premise #0448010246. Please review this document carefully as some action is required on your part.

If you have any questions regarding this matter, feel free to contact me.

Very truly yours,

Edwin L. Spackey

Environmental Specialist

ELS:sg/bl

Enclosure

cc: Donald M. Moline, P.E., Commissioner Toledo Environmental Services Division Elaine Wurzel, Sun Refining and Marketing

ES.25A

NOTICE OF VIOLATION September 19, 1990

The City of Toledo Environmental Services Division hereby serves notice that:

Sun Refining and Marketing 1601 Woodville Road P.O. Box 920 Toledo, Ohio 43693

has violated the following environmental laws, orders, rules, or regulations on the indicated dates at the above address:

Dates of Violation(s)

September 9, 1990

Regulation(s) Violated

1. TMC 1777.01

Description of Source(s) and Violation(s)

Soot blowing in a manner that caused unreasonable soiling of neighboring Toledo properties.

The above violation(s) may subject the violator to penalties of up to \$5,000 per violation. It is possible that a penalty will be assessed in this case. If a penalty is to be assessed, the amount will be determined after your response is reviewed.

REQUIRED ACTIONS

Within fourteen (14) days of this Notice of Violation, you shall:

- 1. Abate the violation(s) or provide for an acceptable remedy.
- 2. Reply in writing to this Notice of Violation. The reply shall include:
 - a. description(s) and date(s) of action(s) taken thus far to abate the violation(s).
 - b. description(s) and expeditious time schedule of action(s) yet to be taken to remedy the violation(s).
 - c. description(s) of action(s) taken or to be taken to prevent recurrence of the violation(s).

RECOMMENDED REMEDIAL ACTIONS

It is recommended that you consider the following suggestions:

Blow soot in such a manner as to minimize the impact on the neighboring Toledo properties.

Your written response and any questions regarding this Notice of Violation should be directed to Edwin L. Spackey at Toledo Environmental Services Division, 26 Main Street, Toledo, Ohio, 43605, or call (419) 693-0350.

ELS:sg.bl



CITY OF TOLEDO OHIC

DEPARTMENT OF PUBLIC UTILITIES Division of Environmental Services

Michael J. White, P.E. Director International Park 26 Main Street Toledo, Ohio 43605 (419) 693-0350 FAX (419) 693-2152

Donald M. Moline, P.E. Commissioner

September 25, 1990

CERTIFIED MAIL

Mr. Larry T. Clere, Manager Risk Management Department Sun Refining and Marketing Company Toledo Refinery P. O. Box 920 Oregon, OH 43693

Re: Notice of Violation

Dear Mr. Clere:

Enclosed please find a "Notice of Violation" for <u>Sun Refining and Marketing Company</u>, 0448010246 P012. Please review this document carefully as some action is required on your part.

If you have any questions regarding this matter, feel free to contact me.

Very truly yours,

laxue a G

Clarence A. Young Engineering Associate

CAY/par

Enclosure

cc: Donald M. Moline, P.E., Commissioner
Toledo Environmental Services Division
Dave Brown, Ohio EPA

Elaine M. Moore, Sun Refining and Marketing

NOTICE OF VIOLATION September 25, 1990

The City of Toledo Environmental Services Division hereby serves notice that:

Sun Refining and Marketing Company 1819 Woodville Road Oregon, Ohio 43616

has violated the following environmental laws, orders, rules, or regulations on the indicated dates at the above address.

Dates of Violation(s)

October 1, 1988 through June 30, 1990

Regulation(s) violated

Description of Source(s) and
Violation(s)

OAC Rule 3745-18-54(0)(10)

Sulfur Recovery Unit (SRU) Availability Reports submitted for the fourth quarter of 1988 through the second quarter of 1990 for Sun Refining and Marketing Company's (Ohio EPA Premise No. 0448010246) Amine Clause Sulfur Recovery Unit (Ohio EPA Source No. PO12) demonstrated an average emission rate in excess of 0.07 pounds of sulfur dioxide per pound of sulfur processed.

OAC Rule 3745-15-06(D)

In the judgement of the Director and/or appointed representative of the Ohio EPA, the above-mentioned emissions from P012 are the result of excessive and unduly prolonged malfunctions.

The above violation(s) may subject the violator to penalties of up to \$25,000 per violation. It is possible that a penalty may be assessed in this case. If a penalty is to be assessed, the amount will be determined after your response is reviewed.

Required Actions

Within 14 days of receipt of this Notice of Violation, you shall:

- Abate the violation(s) or provide for an acceptable remedy.
- 2. Reply in writing to this Notice of Violation. The reply shall include:
 - a. description(s) and date(s) of action(s) taken thus far to abate the violation(s).
 - b. description(s) and expeditious time schedule of action(s) yet to be taken to remedy the violation(s).
 - c. description(s) of action(s) taken or to be taken to prevent recurrence of the violation(s).
- 3. Prepare, submit and implement a preventive maintenance and malfunction abatement plan which is acceptable to the Director and/or appointed representative of the Ohio EPA designed to minimize the shutdowns resulting from malfunctions occurring during the fourth quarter of 1988 through the second quarter of 1990.

Recommended Remedial Actions

It is recommended that you consider the following suggestions:

On April 26, 1988, the Director of the Ohio EPA issued Final Findings and Orders for air pollution violations associated with Sun Refining and Marketing Company Toledo Refinery. The Ohio EPA recognizes that the control plan developed by Sun Refining and Marketing Company has improved particular aspects of the performance of the SRU. However, it is the opinion of the Director of Ohio EPA that Sun Refining and Marketing Company has failed to develop and implement an acceptable control plan as required by the above-mentioned orders, to minimize shutdowns of the SRU due to malfunctions and periodic State boiler inspections. It is recommended that Sun Refining and Marketing Company submit such a control plan in accordance with the April 26, 1988 Final Findings and Orders, that is acceptable to the Director.

Your written response and any questions regarding this Notice of Violation should be directed to <u>Clarence A. Young</u> at Toledo Environmental Services Division, 26 Main Street, Toledo, Ohio 43605, or call (419) 693-0350.

October 4, 1990

CERTIFIED MAIL

Mr. Larry T. Clere
Manager, Risk Management Department
Sun Refining and Marketing Company
Toledo Refinery
P.O.Box 920
Oregon, Ohio 43693

Re: Notice of Violation

Dear Mr. Clere:

Enclosed please find a "Notice of Violation" for <u>Sun Refining and Marketing Company</u>, <u>Toledo Refinery</u>, <u>Premise No. 0448010246</u>, <u>Plant 3 Crude Tower</u>. Please review this document carefully as some action is required on your part.

If you have any questions regarding this matter, feel free to contact me.

Very truly yours,

Clarence A. Young

Clasus a Young

CAY:mg/c2

Enclosure

cc: Elaine M. Moore, Env Sun Refining and Mar Donald M. Moline, P. Toledo Environmental

RECEIPT FOR CERTIFIED MAIL

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERGE PROVIDED

NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Continue Continue Continue Continue Fee

P.O., State and Alp. 920

P.O., State and Alp. 920

P.O., State and Alp. 920

Special Delivery Fee

Restricted Delive

NOTICE OF VIOLATION October 4, 1990

The City of Toledo Environmental Services Division hereby serves notice that:

Sun Refining and Marketing Company 1819 Woodville Road Oregon, Ohio 43616

has violated the following environmental laws, orders, rules, or regulations on the indicated dates at the above address:

Dates of Violation(s) August 15, 1990

Regulation(s) Violated

1. OAC rule 3745-15-07

Description of Source(s) and Violation(s)

On the above date, TESD responded to numerous citizen complaints related to a crude oil release into the atmosphere. Sun indicated the release was attributed to the repair of the control system power supply at Plant 3.

During the repair, a malfunction caused a power interruption to the operator station and controllers. The power loss to the controllers allowed excess crude to flow into the Plant 3 crude tower until the tower filled. Safety valves on the crude tower opened and released crude oil to the atmosphere at a rate of approximately 17.5 tons (100 barrels) over a 3.5 minute time span. The crude oil release caused a public nuisance for the residents in the vicinity of the refinery.

The above violation(s) may subject the violator to penalties of up to \$25,000.00 per violation. It is possible that a penalty will be assessed in this case. If a penalty is to be assessed, the amount will be determined after your response is reviewed.

REQUIRED ACTIONS

Within fourteen (14) days of this Notice of Violation, you shall:

- 1. Abate the violation(s) or provide for an acceptable remedy.
- 2. Reply in writing to this Notice of Violation. The reply shall include:
 - a. description(s) and date(s) of action(s) taken thus far to abate the violation(s).
 - b. description(s) and expeditious time schedule of action(s) yet to be taken to remedy the violation(s).
 - c. description(s) of action(s) taken or to be taken to prevent recurrence of the violation(s).
 - d. specific reference to the recommendations provided in your letter dated August 31, 1990 to TESD and time schedules (as required in Item 2(b) above) demonstrating expeditious implementation of all recommendations.

RECOMMENDED REMEDIAL ACTIONS

It is recommended that you consider the following suggestions:

1. Provide ways for operators to distinguish between total power failure and operator station power failure until permanent steps can be taken to prevent similar power losses.

Your written response and any questions regarding this Notice of Violation should be directed to <u>Clarence A. Young</u> at Toledo Environmental Services Division, 26 Main Street, Toledo, Ohio, 43605, or call (419) 693-0350.

DEC 22 '94 15:28 POLLUTION CONTROL

P.2

Juno 27, 1991

CERTIFIED HAIL

Mr. Larry T. Clere
Manager
Risk Management Department
Sun Refining and Marketing Company
Toledo Refinery
P. O. Box 920
Oregon, Ohio 43693

Re: Notice of Violation

Dear Mr. Clere:

Enclosed please find a "Notice of Violation" for <u>Sun Refining and Marketing</u> <u>Company. 0448010246P011</u>. Please review this document carefully as some action is required on your part.

If you have any questions regarding this matter, feel free to contact me.

Very truly yours,

Vocant E. Wild

Vincent E. Wolph Environmental Specialist

VEW: CAY: mg.c15

Enclosure

cc: Donald M. Holine, P.E., Commissioner
Toledo Environmental Services Division
Elaine M. Moore, Environmental Engineer
Sun Refining and Marketing Company

P.3

DEC 22 '94 13:23 POLLUTION CONTROL ..

MOTICE OF VIOLATION

The City of Toledo Environmental Services Division hereby serves notice that:

Sun Refining and Harketing Company 1819 Woodville Road Oragon, Ohio 43616

has violated the following environmental laws, orders, rules, or regulations on the indicated dates at the above address:

Dates of Violation(s) June 13, 1991 and June 17, 1991

Regulation(s) Violated

1. O.A.C. rule 3745-17-08(8)

Description of Source(s) and Wolation(s)

On June 13, 1991, representatives from the oldo Environmental Services Division (TESD) observed the unloading of the Electro Static Precipitator noppers at the CO boilers (Ohio EPA source #B045 and #B047). The rimary source of the particulate matter controlled by the ESP is the Faid Catalytic Cracker (Ohio EPA surce #P011). The unloading practices employed by Sun Rofining and tarketing Company (Ohio EPA premise #0448010246) caused excessive functive dust to become airborne, defonstrating that the company failed to take or install reasonably available control measures to prevent subtan occurrence.

2. 0.A.C. rule 3745-21-09(H)(2)

On June 17, 191, a representative from TESO is pected the refinery wastewater sparator and observed separator lies not kept in a closed position while not in actual use.

The above violation(s) may subject the violator to penalties of up to \$2\$,000 per violation. It is possible that a penalty will be as seed in this case. If a penalty is to be assessed, the amount will be determined after your response is reviewed.

P.4

DEC 22 '94 15:29 POLLUTION CONTROL

REQUIRED ACTIONS

Within fourteen (14) days of this Notice of Violation, you shall:

- 1. Abote the violation(s) or provide for an acceptable remedy.
- 2. Reply in writing to this Notice of Violation. The reply shall include:
 - a. description(s) and date(s) of action(s) taken thus far to abate the violation(s).
 - b. description(s) and expeditious time schedule of action(s) yet to be taken to remedy the violation(s).
 - c. description(s) of action(s) taken on to be taken to prevent recurrence of the violation(s)

RECOMMENDED RENEDITAL ACTIONS

It is recommended that you consider the following suggestions:

- I. Install appropriate hoses and connection devices to allow for unloading of the hoppers pneumatically by a vacuum truck equipped with a fabric filter at the truck exhaust.
- 2. Develop work practices to minimize the dime the separator lids are left open. Instruct all operators on the proper work practices and requirements of environmental regulations affecting the refinery wastewater separator.

Your written response and any questions regarding this Notice of Violation should be directed to <u>Vincent E. Wolph</u> at Toledo Environmental Services Division. 26 Main Street, Toledo, Ohio, 43605, or will (419) \$93-0350.

VEW:CAY:mg.c21

SENDER: Complete Items 1 and 2 when additional services are desired, and complete items 5 and 4. Put your address in the "RETURN TO" Space on the reverse side. Fallure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested. Show to whom delivered, date, and addressee's address. (Extra charge) Services are desired, and complete items The person delivered to the reverse side. Fallure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery and the person delivered to and the date of delivery and the person delivered to an addresse address. Show to whom delivered, date, and addressee's address. (Extra charge)	
3. Article Addressed to: MR. LARRY T. Clere Sun Refining & Marketry Toledo Refinery PO BOX 920 Oregon OH 43693	4. Article Number Y 29 9 00 57 Type of Service: Registered Insured Cortified CoD Express Mell Return Receipt for Merchandise Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature — Address X 6. Signature — Agent X 7. Date of Delivery 3-26-92	8. Addressee's Address (ONLY if requested and fee paid)
PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT	

Mr. Larry T. Clere, Manager Risk Management Dept. Sun Refining & Marketing Co. Toledo Refinery P.O. Box 920 Oregon, Ohio 43693

Dear Mr. Clere:

Enclosed please find a "Notice of Violation" for Sun Refining & Marketing Co., premise no. 0448010246P011. Please review this document carefully as some action is required on your part.

If you have any questions regarding this matter, feel free to contact me.

Very Truly Yours,

Vincent E. Wolph Environmental Specialist

VW:kd

Enclosure

cc: Donald M. Moline, P.E., Commissioner Toledo Division of Pollution Control

NOTICE OF VIOLATION March 25, 1992

The City of Toledo Division of Pollution Control hereby serves notice that:

Sun Refining & Marketing Co. Toledo Refinery P.O. Box 920 Oregon, Ohio 43693

has violated the following environmental laws, orders, rules, or regulations on the indicated dates at the above address.

Dates of Violation(s)

March 15, 1992 and March 16, 1992

Regulation(s) violated

O.A.C. Rule 3745-17-07(A) and (B)

T.M.C. 1777.03 (A)(1) and (2)

O.A.C Rule 3745-17-11(A)(4) T.M.C. 1777.07

T.M.C. 1777.01

Description of Source(s) and Violation(s)

On March 15. representatives from the Toledo Pollution Control Division observed opacity from the F.C.C. Unit, Ohio EPA Source no. P011, in excess of the 20% opacity rule, and emissions in excess of six consecutive o f minutes particulate emissions of shade or density greater than 60% opacity.

Particulate emissions exceeded the permitted limit of 98.1 pounds per hour.

The emissions observed from source P011 were in such amounts as to constitute a public nuisance.

The above violation(s) may subject the violator to penalties of up to \$ 25,000.00 per violation. It is possible that a penalty may be assessed in this case. If a penalty is to be assessed, the amount will be determined after your response is reviewed.

Required Actions

Within 14 days of receipt of this Notice of Violation, you shall:

- Abate the violation(s) or provide for an acceptable remedy.
- 2. Reply in writing to this Notice of Violation. The reply shall include:
 - a. description(s) and date(s) of action(s) taken thus
 far to abate the violation(s).
 - b. description(s) and expeditious time schedule of action(s) yet to be taken to remedy the violation(s).
 - c. description(s) of action(s) taken or to be taken to prevent recurrence of the violation(s).

Recommended Remedial Actions

It is recommended that you consider the following suggestions:

Abide by the Terms and Conditions of your permit. Develop work practices to minimize chance malfunctions going unnoticed for any extended periods of time.

Your written response and any questions regarding this Notice of Violation should be directed to <u>Vincent E. Wolph</u> at Toledo Division of Pollution Control, 26 Main Street, Toledo, Ohio 43605, or call (419) 693-0350.

May 5, 1992

CERTIFIED MAIL

Mr. Larry T. Clere, Manager, Risk Management Dept.
Sun Refining & Marketing Co. Toledo Refinery
P.O. Box 920
Oregon, Ohio 43693

Dear Mr. Clere:

Enclosed please find a "Notice of Violation" for <u>Sun Refining & Marketing Co.</u>, <u>premise no. 0448010246P008</u>. Please review this document carefully as some action is required on your part.

If you have any questions regarding this matter, feel free to contact me.

Very Truly Yours,

Vincent E. Wolph

Environmental Specialist

Vencent E. Wolch.

W:kd

Enclosure

cc: Donald M. Moline, P.E., Commissioner Toledo Division of Pollution Control

NOTICE OF VIOLATION May 5, 1992

The City of Toledo Division of Pollution Control hereby serves notice that:

Sun Refining & Marketing Co. Toledo Refinery P.O. Box 920 Oregon, Ohio 43693

has violated the following environmental laws, orders, rules, or regulations on the indicated dates at the above address.

Dates of Violation(s)

April 13, 1992

Regulation(s) violated

O.A.C. Rule 3745-17-07(A) and (B)
T.M.C. 1777.03 (A) (1) and (2)

O.A.C Rule 3745-17-11(A)(4) T.M.C. 1777.07

T.M.C. 1777.01

<u>Description of Source(s) and Violation(s)</u>

April 13, 1992, representatives from the Toledo Pollution Control Division observed opacity from the flare stack, Ohio RPA Source no. P008, in excess of the 20% opacity rule, and emissions in excess of six consecutive minutes φ£ particulate emissions of shade or density greater than 60% opacity.

Particulate emissions exceeded the permitted limit of 98.1 pounds per hour.

The emissions observed from source P008 were in such amounts as to constitute a public nuisance.

The above violation(s) may subject the violator to penalties of up to \$ 25,000.00 per violation. It is possible that a penalty may be assessed in this case. If a penalty is to be assessed, the amount will be determined after your response is reviewed.

Required Actions

Within 14 days of receipt of this Notice of Violation, you shall:

- Abate the violation(s) or provide for an acceptable remedy.
- 2. Reply in writing to this Notice of Violation. The reply shall include:
 - a. description(s) and date(s) of action(s) taken thus far to abate the violation(s).
 - b. description(s) and expeditious time schedule of action(s) yet to be taken to remedy the violation(s).
 - c. description(s) of action(s) taken or to be taken to prevent recurrence of the violation(s).

Recommended Remedial Actions

It is recommended that you consider the following suggestions:

Abide by the Terms and Conditions of your permit.

Your written response and any questions regarding this Notice of Violation should be directed to <u>Vincent E. Wolph</u> at Toledo Division of Pollution Control, 26 Main Street, Toledo, Ohio 43605, or call (419) 693-0350.



DEPARTMENT OF PUBLIC UTILITIES

Division of Pollution Control

Michael J. White, P.E.

International Park 26 Main Street Toledo, Ohio 43605-2032

Donald M. Meline, P.E. Commissioner

(419) 693-0350 Fax (419) 693-2152

November 8, 1993

CERTIFIED

L. T. Clere Sun Refining and Marketing Company: P. O. Box 920 Toledo, Ohio 43693

> Notice of Violation Re:

.Dear Mr. Clere:

Enclosed please find a "Notice of Violation" for Sun Refining and Marketing Company, 0448010246B051. Please review this document carefully as some action is required on your part.

If you have any questions regarding this matter, feel free to contact me.

Very truly yours,

Karen Dranato Karen P. Granata

Engineering Associate

Enclosures

Donald M. Moline, P.E., Commissioner Toledo Division of Pollution Control

NOTICE OF VIOLATION

The City of Toledo Division of Pollution Control hereby serves notice that:

Sun Refining and Marketing Company . 1819 Woodville Road Oregon, Ohio 43616

has violated the following environmental laws, orders, rules, or regulations on the indicated dates at the above address.

Dates of Violations

August 22, 1993

August 24, 1993

August 26, 1993

August 27, 1993 - August 29, 1993

August 30, 1993

September 3, 1993

September 9, 1993

September 10, 1993

September 12, 1993 September 13, 1993

September 14, 1993

September 16, 1993

September 20, 1993 - September 23, 1993 September 30, 1993

Regulations violated.

OAC 3745-18-06 (G) 40 CFR 60.104 (a) (1)

Description of Violations

The 1993 third quarter report (for the refinery's NSPS heaters showed that Sun Refining and .Marketing Company operated. Heater H-311, Ohio EPA Source No. 0448010246B051, with fuel gas containing greater than 0.10 gr/DSCF af hydrogen . sulfide for 6.2% of the third quarter.

OAC 3745-35-02 (D) (6) ORC 3704.05 (C)

Sun Refining and Marketing Company violated the Special Terms and Conditions of its Permit to Operate by operating with fuel gas containing greater than 0.10 gr/DSCF of hydrogen sulfide for 6.2% of the third quarter.

The above Violation(s) may subject the violator to penalties of up to \$25,000 per violation. It is possible that a penalty will be assessed in this case. If a penalty is to be assessed, the amount will be determined after your response is reviewed.

Required Actions

Within 14 days of receipt of this Notice of Violation, you shall:

- 1. Abate the violations or provide for an acceptable remedy.
- 2. Reply in writing to this Notice of Violation. The reply shall include:
 - a. descriptions and dates of actions taken thus far to abate the violations:
 - -b. descriptions and expeditious time schedule of actions yet to be taken to remedy the violations.
 - c. descriptions of actions taken or to be taken to prevent recurrence of the violations.

Your written response and any questions regarding this Notice of Violation should be directed to Karen P. Granata at Toledo Division of Pollution Control, 26 Main Street, Toledo, Ohio 43605, or call (419) 693-0350.



CITY OF TOLEDO OHIO

DEPARTMENT OF PUBLIC UTILITIES

Division of Pollution Control

Michael J. White, P.E.

International Park 26 Main Street Toledo, Ohio 43605-2032

Donald M. Moline, P.E. Commissioner

(419) 693-0350 Fax (419) 693-2152

November 3, 1994

CERTIFIED

L. T. Clere
Sun Refining and Marketing Company
P. O. Box 920
Toledo, Ohio 43693

Re: Notice of Violation

Dear Mr. Clere:

Enclosed please find a "Notice of Violation" for Sun Refining and Marketing Company, 0448010246B048, B050 and B051. Please review this document carefully as some action is required on your part.

If you have any questions regarding this matter, feel free to contact me.

Very truly yours,

Karen P. Granata Engineering Associate

KPG:evs
Enclosures
cc: Lee Pfouts, Manager
 Toledo Division of Environmental Services

NOTICE OF VIOLATION

The City of Toledo Division of Environmental Services hereby serves notice that:

Sun Refining and Marketing Company 1819 Woodville Road Oregon, Ohio 43616

has violated the following environmental laws, orders, rules, or regulations on the indicated dates at the above address.

Dates of Violations

July 7, 1994 July 8, 1994 July 12, 1994 July 26, 1994 July 27, 1994 July 28, 1994 July 29, 1994 August 1, 1994 August 13, 1994 August 14, 1994 August 19, 1994 August 20, 1994 August 22, 1994 August 24, 1994 August 25, 1994 September 1, 1994 September 7, 1994 September 8, 1994 September 9, 1994 September 10, 1994 September 11, 1994 September 12, 1994 September 13, 1994 September 14, 1994 September 23, 1994

Regulations violated

OAC 3745-18-06 (G) 40 CFR 60.104 (a)(1)

<u>Description of Violations</u>

The 1994 third quarter report for the refinery's NSPS heaters showed that Sun Refining and Marketing Company operated Heater (Ohio EPA Source No. 0448010246B048), Heater H-604 (Ohio EPA Source No. 0448010246B050), and Heater H-311 (Ohio EPA Source No. 0448010246B051) with fuel containing greater than 0.10 gr/DSCF.of hydrogen sulfide.

Sun Refining and Marketing Company violated the Special Terms and Conditions of its Permit to Operate by operating with fuel gas containing greater than 0.10 gr/DSCF of hydrogen sulfide.

OAC 3745-35-02 (D) (6) ORC 3704.05 (C)

The above violation(s) may subject the violator to penalties of up to \$25,000 per violation. It is possible that a penalty will be assessed in this case. If a penalty is to be assessed, the amount will be determined after your response is reviewed.

Required Actions

Within 14 days of receipt of this Notice of Violation, you shall:

- 1. Abate the violations or provide for an acceptable remedy.
- 2. Reply in writing to this Notice of Violation. The reply shall include:
 - a. descriptions and dates of actions taken thus far to abate the violations.
 - b. descriptions and expeditious time schedule of actions yet to be taken to remedy the violations.
 - c. descriptions of actions taken or to be taken to prevent recurrence of the violations.

Your written response and any questions regarding this Notice of Violation should be directed to Karen P. Granata at Toledo Division of Environmental Services, 26 Main Street, Toledo, Ohio 43605, or call (419) 693-0350.



CITY OF TOLEDO OHIO

DEPARTMENT OF PUBLIC UTILITIES

Division of Pollution Control

Michael J. White, P.E.

International Park 26 Main Street Toledo, Ohio 43605-2032

Donald M. Moline, P.E. Commissioner

(419) 693-0350 Fax (419) 693-2152

November 8, 1994

CERTIFIED

L. T. Clere
Sun Refining and Marketing Company
P. O. Box 920
Toledo, Ohio 43693

Re: Notice of Violation

Dear Mr. Clere:

Enclosed please find a "Notice of Violation" for Sun Refining and Marketing Company, 0448010246P009, Plant 4 Flare. Please review this document carefully as some action is required on your part.

If you have any questions regarding this matter, feel free to contact me.

Very truly yours,

Karen P. Granata

Engineering Associate

Kalen P Granosta

KPG:evs
Enclosures

cc: Lee Pfouts, Manager

Toledo Division of Environmental Services

NOTICE OF VIOLATION

The City of Toledo Division of Environmental Services (TDOES) hereby serves notice that:

Sun Refining and Marketing Company 1819 Woodville Road Oregon, Ohio 43616

has violated the following environmental laws, orders, rules, or regulations on the indicated dates at the above address.

Dates of Violations

August 13, 1994

Regulations violated

OAC 3745-15-07

Description of Violations

On the above date, TDOES responded to a malfunction reported by Sun Refining and Marketing Company of the Plant 4 Flare (Ohio EPA Source No. 0448010246P009). Sun Refining and Marketing Company indicated the release was attributed to excessive liquid diverted to the Plant 4 Flare. The excessive liquid was diverted to the flare as a result of process upsets in Plants 4, 5, 6, and 8. The process upsets were due to a failure in the electrical distribution system.

During the malfunction, Sun Refining and Marketing Company released oil to the atmosphere for 15 minutes. The oil release caused a public nuisance for the residents in the vicinity of the refinery.

The above violation(s) may subject the violator to penalties of up to \$25,000 per violation. It is possible that a penalty will be assessed in this case. If a penalty is to be assessed, the amount will be determined after your response is reviewed.

Required Actions

Within 14 days of receipt of this Notice of Violation, you shall:

- . Abate the violations or provide for an acceptable remedy.
- 2. Reply in writing to this Notice of Violation. The reply shall include:
 - a. descriptions and dates of actions taken thus far to abate the violations.
 - b. descriptions and expeditious time schedule of actions yet to be taken to remedy the violations.
 - c. descriptions of actions taken or to be taken to prevent recurrence of the violations.
 - d. specific reference to the recommendations provided in your letter dated November 4, 1994 to TDOES and time schedules (as required in Item 2(b) above) demonstrating expeditious implementation of all recommendations.

Your written response and any questions regarding this Notice of Violation should be directed to Karen P. Granata at Toledo Division of Environmental Services, 26 Main Street, Toledo, Ohio 43605, or call (419) 693-0350.