IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE ORDER

IN THE MATTER OF:	ADMINISTRATIVE CONSENT ORDER
IES UTILITIES, INC.	NO. 97-AQ-20

TO: IES Utilities, Inc.
c/o Daniel Siegfried, Legal Department
200 First Street S.E.
P.O. Box 351
Cedar Rapids, Iowa 52406-0351

I. SUMMARY

This consent order is entered into between IES Utilities Inc. (IES) and the Iowa Department of Natural Resources (DNR) for the purpose of resolving the issue of IES's contribution of sulfur dioxide (SO_2) to three exceedances of the National Ambient Air Quality Standard (NAAQS) in January, February and March 1996.

II. STATEMENT OF FACTS

1. DNR has determined that three exceedances of the SO_2 National Ambient Air Quality 24-hour standard have occurred in Cedar Rapids, Iowa. On January 28, 1996, a SO_2 monitor located at the Scottish Rite Temple at 616 A Avenue N.E. in Cedar Rapids indicated a reading of 0.15 parts per million (ppm); on February 28, 1996, the same monitor rendered a reading of 0.20 ppm; and on March 2, 1996, the same monitor rendered a reading of 0.27 ppm. The level of the 24-hour standard is 0.14 ppm, not to be exceeded more than once per calendar year.

2. IES is an Iowa Corporation with its principal place of business at 200 First Street S.E. in Cedar Rapids, Iowa. IES is an investor-owned public gas and electric utility. Modeling has established that IES's Sixth Street Generating Station, a major stationary source, is a significant contributor to the SO_2 levels monitored. The monitor is located near IES's Sixth Street Generating Station (Sixth Street).

3. Sixth Street, located at 509 6th Street N.E., and Prairie Creek Generating Station, located at 3300 C Street S.W., are coal, gas and resifil fired generating stations located in Cedar Rapids, Iowa, providing electrical and steam service to customers in the Cedar Rapids area. Resifil, currently burned at Sixth Street, is a combustible fuel derived from the furfural manufacturing process.

4. In May 1995, the United States Environmental Protection Agency, (EPA) published its Sulfur Dioxide Network Design Review for Cedar Rapids, Iowa, (Design Review), indicating that certain areas of Cedar Rapids might be nonattainment for SO_2 and recommending the addition and relocation of monitors in and around Cedar Rapids.

5. Upon review of EPA's Design Review, IES began to analyze various options to further minimize any contribution of SO_2 emissions from its two Cedar Rapids generating facilities, Sixth Street and Prairie Creek. IES also met with DNR and the Linn County Health Department (LCHD), and other facilities in the Cedar Rapids area, for the purpose of reviewing EPA's Design Review and strategizing on resolution of the issues raised.

6. IES has considered several options in an attempt to avoid the need for the Cedar Rapids area to be designated as nonattainment for SO_2. The option to close the Sixth Street facility was rejected by IES for the following reasons: "This has been determined not to be a viable option at this time. Thermal energy costs comprise a significant portion of the production costs of major grain processing companies in the downtown Cedar Rapids area. A sudden increase in energy pricing could have significant impact and employment consequences for our major steam customers. IES believes that we must keep Sixth Street station operational to provide these customers with economic thermal energy (steam) in the short term while we search for a long term economic and environmentally balanced energy to fill these customers' needs."

7. IES also has considered the option of initiating an SO_2 emissions minimization plan. IES asserts that this option would allow Sixth Street to continue to provide electricity, service to its steam customers, and reduce SO_2 emissions. Computer modeling performed by IES concluded that SO_2 emissions at a rate of 667 lbs./ hour or less on a 24-hour rolling average basis from Sixth Street would not result in an exceedance of the NAAQS for SO_2. IES asserts that by changing fuel choices to those which have lower sulfur content, SO_2 emissions could be reduced while maintaining the economic viability of the facility. A test burn of a new fuel blend was conducted between November 25 and December 23, 1996, which confirmed that SO_2 emissions did not result in any exceedance of the SO_2 NAAQS and could be managed below the site limit of 667 lbs./hour on a 24-hour rolling average basis. Updated modeling, a copy of which has been provided to DNR by IES, demonstrates attainment for the area using this plan.

8. This Administrative Consent Order is entered into between DNR and IES for the purpose of resolving IES's contribution to the SO_2 National Ambient Air Quality Violations monitored in Cedar Rapids, Iowa.

III. CONCLUSIONS OF LAW

1. This order is issued pursuant to the provisions of Iowa Code sections 455B.134(9) and 455B.138(1), which authorize the Director to issue any administrative orders necessary to secure compliance with or prevent a violation of Iowa Code chapter 455B, Division II, and the rules promulgated and permits issued pursuant thereto, and to prevent, abate, and control air pollution.

2. The emission units located at IES in Cedar Rapids, Iowa, are "air contaminant sources" as defined by Iowa Code section 455B.131(2) and "stationary sources" as defined by 567 Iowa Administrative Code (I.A.C.) 20.2.

3. According to 567 I.A.C. 28.1, the ambient air quality standards for the State of Iowa shall be the National Primary and Secondary Ambient Air Quality Standards (NAAQS) located at 40 C.F.R. Part 50, as amended through July 1, 1987.

4. The primary 24-hour ambient air quality standard for SO_2 is 0.14 parts per million, according to the provisions of 40 CFR Part 50. The 24-hour maximum allowable concentration should not be exceeded more that once per calendar year. The concentrations monitored in this case constitute a violation of this standard.

5. An exceedance of the NAAQS for SO_2 constitutes "air pollution" as defined by Iowa Code section 455B.131(3).

6. In accordance with the provisions of Iowa Code section 455B.134(9), the Director shall issue orders consistent with the rules to cause the abatement or control of air pollution.

7. According to the provisions of 567 I.A.C. 22.1(1) and 567 I.A.C. 22.1(3), the owner or operator of a stationary source shall obtain a permit to install or alter equipment or control equipment. Any modifications occurring as a result of this consent order shall require a construction permit or shall meet the requirements of a construction permit exemption contained in the provisions of 567 I.A.C. 22.1(2).

IV. ORDER

THEREFORE, DNR orders and IES Utilities Inc. agrees to do the following:

With regard to the Sixth Street Generating Station:

1. Effective on the date this order is signed by both parties, IES agrees to limit the site emissions from the Sixth Street Generating Station boiler stacks to a maximum emission rate of 84 grams/sec (667 lbs./hour) SO_2 on a twenty-four hour rolling average basis. The value of 84 grams/sec (667 lbs./hour) SO_2 reflects the modeling requirements for demonstrating and maintaining the SO_2 NAAQS.

2. By no later than December 1, 1997, IES shall have in place at the Sixth Street Generating Station monitoring and data collection equipment capable of recording total site hourly and twenty-four hour rolling average SO_2 emission information.

3. By no later than December 1, 1997, IES shall begin maintaining hourly and twenty-four hour rolling average records for its Sixth Street Generating Station which will verify compliance with the twenty-four hour rolling average SO_2 emission limit. These records shall include the data required pursuant to paragraph 2 above and 40 CFR Part 75 for Continuous Emissions Monitoring.

With regard to the Prairie Creek Generating Station:

1. IES shall install a combined stack for Units one (1) and two (2) to a height of three hundred and twenty-seven (327) feet above ground level. IES shall extend the existing boiler stack for Unit three (3) to a height of 200 feet above ground level. Unit four (4) shall utilize its existing stack with no changes. By no later than April 15, 1998, IES shall submit to DNR or LCHD, as appropriate, applications for any required air quality construction permits. The construction shall be completed within 24 months of issuance of the necessary permits.

2. By no later than July 1, 1998, IES shall limit the unit emissions from its Prairie Creek Generating Station Unit three (3) to a maximum emission rate of 62 g/s (495.9 lbs./hr) SO_2, and from its Unit four (4) boiler stack to a maximum emission rate of 162 g/sec (1289.3 lbs./hour) SO_2 on a twenty-four hour rolling average basis.

3. By no later than December 1, 1997, IES shall have in place on Units three (3) and four (4) at Prairie Creek Generating Station monitoring and data collection equipment capable of recording total unit hourly and twenty-four hour rolling average SO_2 emission information.

4. By no later than December 1, 1997, IES shall begin maintaining hourly and twenty-four hour rolling average records for its Units three (3) and four (4) at the Prairie Creek Generating Station. These records shall include the data required under Paragraph 3 and 40 CFR Part 75 for Continuous Emissions Monitoring.

5. By no later than July 1, 1998, IES shall limit the sulfur content of the fuels burned in Units one (1) and two (2) so as to limit the emissions from Units 1 and 2 to 5.0 lbs. SO_2 /MMBtu of heat input. For Units one (1) and two (2), IES shall maintain documentation of station fuel burns via its monthly filed Federal Energy Regulatory Commission (FERC) Form 423. Also for Units one (1) and (2), IES shall collect and maintain Coal Supplier analysis report documentation, including collection and preparation of samples to follow latest applicable standards published by the American Society for Testing and Materials (ASTM).

V. WAIVER OF APPEAL RIGHTS

This order is entered into knowingly and with the consent of IES Utilities Inc. For that reason, IES Utilities Inc. waives its right to appeal this order or any part thereof.

VI. NONCOMPLIANCE

Failure to comply with this order may result in the imposition of administrative penalties or referral to the Attorney General's office to obtain injunctive relief and civil penalties pursuant to the provisions of Iowa Code section 455B.146. IES reserves the right to contest, on all bases available in law or equity, any such actions for penalties or damages.

Any questions regarding this consent order should be directed to:

Anne Preziosi
Iowa Department of Natural Resources
Henry A. Wallace Building
900 East Grand Avenue
Des Moines, Iowa 50319-0034

LARRY J. WILSON, DIRECTOR
IOWA DEPARTMENT OF NATURAL RESOURCES

Dated this 20 day of November, 1997.

PHILIP D. WARD, Vice-President and
General Manager, GENCO
for IES UTILITIES INC.

Dated this 19th day of NOVEMBER, 1997.

Appendix D

Linwood Administrative Consent Order

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER

IN THE MATTER OF:	ADMINISTRATIVE CONSENT ORDER
LINWOOD MINING & MINERALS CORP.	NO. 98-AQ-7

TO: Linwood Mining & Minerals Corp.
c/o Robert Niemela
General Manager, Operations
401 East Front Street
Davenport, Iowa 52804

Linwood Mining & Minerals Corp.
c/o John L. Bush, Registered Agent
4321 E. 60th Street
Davenport, Iowa 52804

I. SUMMARY

This Administrative Consent Order is entered into between the Iowa Department of Natural Resources (DNR) and Linwood Mining & Minerals Corporation (Linwood) for the purpose of resolving PM-10 National Ambient Air Quality Violations monitored in Buffalo, Iowa. This Administrative Consent Order supersedes and replaces Administrative Order No. 97-AQ-10, which was issued on May 30, 1997.

Any questions regarding this order should be directed to:

Relating to technical requirements:
Doug Campbell
Iowa Department of Natural Resources
7900 Hickman Road, Suite 1
Des Moines, Iowa 50322
Ph: 515/281-8930

Relating to appeal rights:
Anne Preziosi
Iowa Department of Natural Resources
7900 Hickman Road, Suite 1
Des Moines, Iowa 50322
Ph: 515/281-6243

II. STATEMENT OF FACTS

1. DNR has monitored three exceedences of the 24-hour PM-10 National Ambient Air Quality Standard. On October 15, 1995, a DNR monitoring site located at 11100-110th Avenue in Buffalo, Iowa, recorded a PM-10 concentration of 156.5 micrograms per cubic meter (ug/m^3), and on August 25, 1995, the same monitor recorded

a value of 162.7 ug/m^3. On April 26, 1994, a monitored value of 229 ug/m^3 also was recorded at this site. Per 40 C.F.R. Part 50, Appendix K, the number of expected exceedences was calculated to be 4.8 for the three calendar year period from 1993 through 1995.

2. During the period 1993 through 1995, the annual PM-10 National Ambient Air Quality Standard was exceeded. The monitored annual arithmetic mean for 1993 was 46.7 ug/m^3, for 1994 was 60.5 ug/m^3, and for 1995 was 67.1 ug/m^3, for a three year average of 58.1 ug/m^3.

3. Linwood Mining & Minerals Corp. has a facility located in Buffalo, Iowa. Modeling has established that Linwood Mining & Minerals Corp. is a contributor to the PM-10 levels monitored.

4. The DNR and Linwood have cooperated in an effort to reach a resolution in order to avoid having to redesignate the area to be in nonattainment for PM-10. For that purpose, DNR and Linwood have agreed to enter into this Administrative Consent Order.

Linwood has already completed the following projects as part of the agreement with DNR of which this Administrative Consent Order is a part: Linwood has raised the stack for its LP-2 source (Hydrate Silos) and this revised stack height has been included in the revised modeling analysis. Linwood has added and is currently operating a conveyor belt system passing over Highway 22 to allow a reduction in the use of 50-ton trucks crossing Highway 22. The lime kiln exhaust stack (LP-4), was in place at the start of the fourth quarter of 1997. DNR regards the completion of these projects as necessary to the resolution of the PM-10 National Ambient Air Quality Standards violations in Buffalo, Iowa.

Additionally, Linwood has relocated the scale house to a location north of Highway 22 and has added a truck tire wash at the location indicated on Exhibit "A" attached to this Consent Order and by this reference made a part hereof. Linwood has also designed traffic patterns entering and exiting the plant to minimize fugitive dust leaving the plant. Linwood has paved the northern plant exit road to control emissions from track out.

III. CONCLUSIONS OF LAW

1. This order is issued pursuant to the provisions of Iowa Code sections 455B.134(9) and 455B.138(1), which authorize the Director to issue any administrative orders necessary to secure compliance with or prevent a violation of Iowa Code chapter 455B, Division II, and the rules promulgated and permits issued pursuant thereto, and to prevent, abate, and control air pollution.

2. The emission units and fugitive emissions located at Linwood Mining & Minerals Corp. in Buffalo, Iowa, are "air contaminant sources" as defined by Iowa Code section 455B.131(2) and "stationary sources" as defined by 567 Iowa Administrative Code (I.A.C.) 20.2.

3. According to 567 I.A.C. 28.1, the ambient air quality standards for the State of Iowa shall be the National Primary and Secondary Ambient Air Quality Standards (NAAQS) located at 40 C.F.R. Part 50, as amended through July 1, 1987.

4. The primary and secondary 24-hour ambient air quality standards for PM-10 are 150 ug/m^3, 24-hour average concentration. The standards are attained when the expected number of days per calendar year with a 24-hour average concentration above 150 ug/m^3, as determined in accordance with 40 C.F.R. Part 50, Appendix K, is equal to or less than one. The concentrations monitored in this case and the resulting estimated number of exceedences constitute a violation of this standard.

5. The level of the primary and secondary annual standards for PM-10 is 50 ug/m^3, annual arithmetic mean averaged over a three calendar year period. The standards are attained when the expected annual arithmetic mean concentration, as determined in accordance with 40 C.F.R. Part 50, Appendix K, is less than or equal to 50 ug/m^3. The average of the annual arithmetic means for the period 1993 through 1995 exceeds this standard.

6. An exceedence of the NAAQS for PM-10 constitutes "air pollution" as defined by Iowa Code section 455B.131(3).

7. In accordance with the provisions of Iowa Code section 455B.134(9), the Director shall issue orders consistent with the rules to cause the abatement or control of air pollution.

8. According to the provisions of 567 I.A.C. 22.1(1) and 567 I.A.C. 22.1(3), the owner or operator of a stationary source shall obtain a permit to install or alter equipment or control equipment. Any modifications occurring as a result of this consent order shall require a construction permit or shall meet the requirements of a construction permit exemption contained in the provisions of 567 I.A.C. 22.1(2).

9. According to the provisions of 567 I.A.C. 23.2(2)"c," no person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable

precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. "Reasonable precautions" are defined in this rule.

IV. ORDER

THEREFORE, DNR orders and LINWOOD AGREES to the following:

1. In accordance with the provisions of 567 I.A.C. 23.3(2)"c"(1), Linwood shall not allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. Also in accordance with that rule, Linwood shall take reasonable precautions as defined in the rule to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

2. By no later than April 1, 1998, Linwood shall fence the property lines indicated on Exhibit "A" attached to this Consent Order and by this reference made a part hereof, in order to restrict public access to its facility. Linwood shall install a five-foot tall chain link fence, of the type routinely used in industrial areas, on the south and north of Highway 22. The fence shall be parallel to Highway 22 and shall be located on Linwood property. The remainder of the fencing to be installed shall consist of a combination of barbed wire and woven wire with three or four strands of barbed wire. Existing fencing shall be inspected and repaired. Instead of installing fencing along the portions of the plant property that border the river, Linwood may install equipment adequate to ensure 24-hour surveillance of all gaps in the fenceline along the river boundaries. "No trespassing" signs shall be posted at both ends of the gap in the fence coverage to further restrict public access.

Note: The Highway 22 corridor has been fenced with a five-foot high-galvanized chain link fence. The western quarry boundary has been fenced with a woven wire fence. The northern boundary will be fenced pending installation of a buried landfill gas recovery line in this same area. The projected completion date for fencing in the gas line area is April 1, 1998.

3. Linwood shall adopt the formal Fugitive Dust Maintenance Program which is attached as Exhibit "B" and by this reference made a part hereof. This program shall become effective immediately upon the signing of this Consent Order.

Note: The Fugitive Dust Maintenance Program has been implemented and monthly inspections are being performed on the fugitive dust sources. Written reports are generated by Linwood to document the results of these inspections.

4. Linwood shall control the fugitive emissions from the plant haul roads with an effective control efficiency of 95% by applying lignin suppressant. There are 8700 feet of unpaved plant roads. The spray application width is 20 feet. At the initial application, a lignin suppressant shall be applied to the entire road surface to bring the ground inventory to 0.25 gallons (concentration) per square yard. A total of 4833 gallons of lignin suppressant shall be applied initially. After the initial application, a solution of water and lignin shall be applied in one or more applications resulting in 0.05 gallons lignin concentrate per square yard being applied every two weeks. A total of 966 gallons of lignin suppressant shall be applied every two weeks, except when the temperature at the point of wetting would be below 0 C. (32 F.) (as determined using a thermometer located at the facility) or conditions due to weather in combination with the application of lignin suppressant would create dangerous conditions. Linwood shall maintain records of these applications, which shall include the dates and times of each application, the amount of water and lignin applied, and percentages of each contained in the solution used, and the specific area to which the solution was applied. If the water and lignin are not applied because the site ambient air temperature is less than 0 C (32 F) during the entire day, then the records should indicate this. Records shall be retained for a period of two years following the date of the above entries and shall be made available to the DNR upon request.

Note: Linwood has implemented a fugitive dust control program for its haul roads and the recordkeeping requirements, as described above.

5. Linwood shall locate the storage pile bases as designated on Exhibit "C" attached to this Consent Order. Linwood shall limit storage pile size to the sizes indicated on Exhibit "C." Exhibit "C" shall by this reference become a part of this Consent Order.

Note: Linwood has located the storage pile bases as designated in Exhibit "C". Additionally, the storage pile sizes have been limited to the sizes listed in Exhibit "C".

6. By no later than April 1, 1998, Linwood shall submit to DNR any and all additional information required to complete air quality construction permit applications to amend the permits for the sources listed in Exhibit "D" attached to this Consent Order to change the allowable emissions limits to the limits listed in Exhibit "D." The applications shall be consistent with the information contained in Exhibit "D." Exhibit "D" shall by this reference become a part of this Consent Order. The modification of these emission points shall be completed by no later than August 1, 1998, or within 60 days of the issuance of the necessary permits, whichever last occurs.

7. By no later than September 30, 1998, or within 60 days of the issuance of the permit for CC-1 (Old Mill) required in Item 8 above, whichever last occurs, the stack for CC-1 will be raised to a height of 21.95 meters above ground level. Additionally, the CC-1 discharge configuration will be changed from horizontal to unobstructed vertical, with a stack diameter of 0.74 meters.

8. In accordance with the provisions of Air Quality Permit No. 73-A-219-S1, issued on September 19, 1996, for Kiln #4, Linwood shall install on the Kiln #4 stack a COM monitor in accordance with the provisions of 40 CFR 60.343.

Note: The opacity monitor has been installed and is operational. Compliance certification tests of the opacity monitor will be performed in the near future.

9. Linwood shall continue to comply with all paragraphs of Iowa DOT Agreement No. 94-16-068. A copy of this agreement is provided in Exhibit "E" of this Consent Order. Exhibit "E" shall by this reference become a part of this Consent Order.

10. Linwood shall submit to the DNR written quarterly reports detailing progress toward the completion of the requirements of this Consent Order, including compliance with the requirements of all air quality construction permits issued as a result of this Consent Order. The quarterly reports shall be due no later than 30 days following the close of each quarter. The first report shall be due on April 30, 1998.

V. APPEAL RIGHTS

Pursuant to the provisions of Iowa Code section 455B.138 and 561 I.A.C. 7.5(1), as adopted by reference at 567 I.A.C. chapter 7, a written Notice of Appeal to the Environmental Protection Commission may be filed within 30 days of receipt of this order. The Notice of Appeal should be filed with the Director, and must identify the specific portion or portions of this order being appealed and include a short and plain statement of the reasons for the appeal. A contested case hearing will be commenced pursuant to the provisions of Iowa Code chapter 17A and 561 chapter 7.

V. NO ADMISSION

While Linwood agrees to comply with the orders contained herein, it makes no admission as to the Findings of Facts and Conclusions of Law.

VI. WAIVER OF APPEAL RIGHTS

This order in entered into knowingly and with the consent of Linwood. For that reason, Linwood waives its right to appeal this order or any part thereof.

VII. NONCOMPLIANCE

Failure to comply with this order may result in the imposition of administrative penalties or referral to the Attorney General's office to obtain injunctive relief and civil penalties pursuant to the provisions of Iowa Code section 455B.146.

VIII. TERMINATION

With the exception of the recordkeeping and reporting requirements discussed above, this Consent Order shall terminate upon a showing by Linwood, acceptable to DNR, that it has complied with the obligations contained herein.

LARRY J. WILSON, DIRECTOR
IOWA DEPARTMENT OF NATURAL RESOURCES

Dated this 3 day of February, 1998.

for LINWOOD MINING & MINERALS CORP.

Dated this 28 day of JANUARY, 1998.

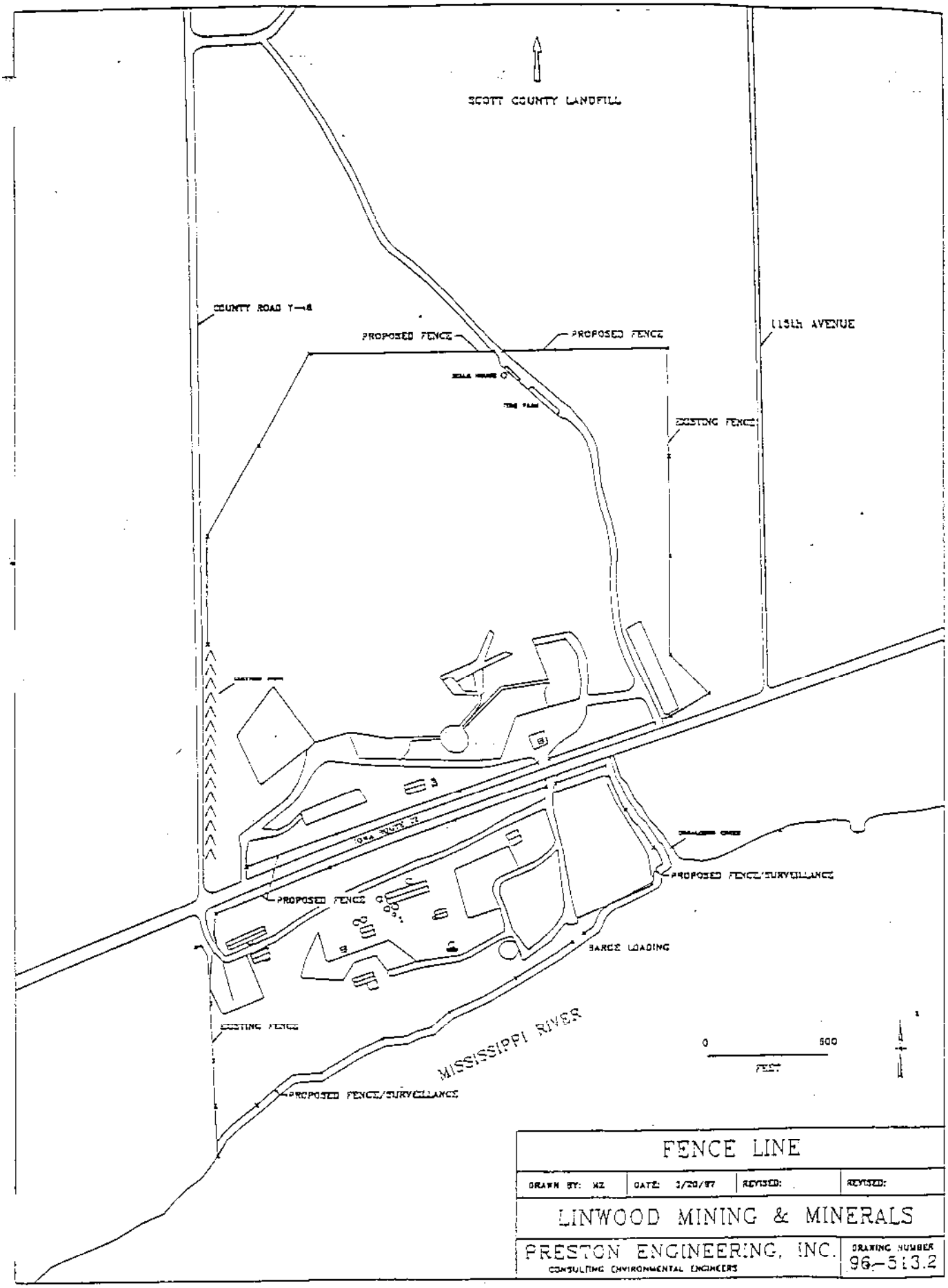

SCOTT COUNTY LANDFILL
COUNTY ROAD Y-4
PROPOSED FENCE
PROPOSED FENCE
115th AVENUE
EXISTING FENCE
PROPOSED FENCE/SURVEILLANCE
PROPOSED FENCE
BARGE LOADING
EXISTING FENCE
MISSISSIPPI RIVER
PROPOSED FENCE/SURVEILLANCE
0
500
FEET
FENCE LINE
DRAWN BY: MZ
DATE: 3/20/97
REVISED:
REVISED:
LINWOOD MINING & MINERALS
PRESTON ENGINEERING, INC.
CONSULTING ENVIRONMENTAL ENGINEERS
DRAWING NUMBER
96-513.2

Exhibit "A"

Exhibit "B"

FUGITIVE DUST MAINTENANCE PROGRAM

1. At all times, Linwood shall take reasonable precautions to prevent visible emissions of fugitive dust from going beyond the Linwood property line in accordance with the provisions of 567 I.A.C. 23.3(2)"c."

2. Operating and maintenance personnel must take immediate action to prevent continued discharge of fugitive dust.

3. The General Manager of Operations, or his designee, shall conduct monthly on site inspections of all emission points, emission units, control equipment, and manufacturing equipment. These on site inspections shall be accompanied by the appropriate company personnel. Monthly reports shall be generated following each site visit.

4. Inspection reports shall include all potential equipment maintenance requirements and date of repair. Maintenance items not taken care of prior to the next inspection shall be carried over on the new inspection report.

5. Linwood shall maintain records at the plant site of any other fugitive dust abatement actions taken.

6. These records shall be made available upon request.

Exhibit "C"
Linwood Mining and Mineral Storage Pile Data

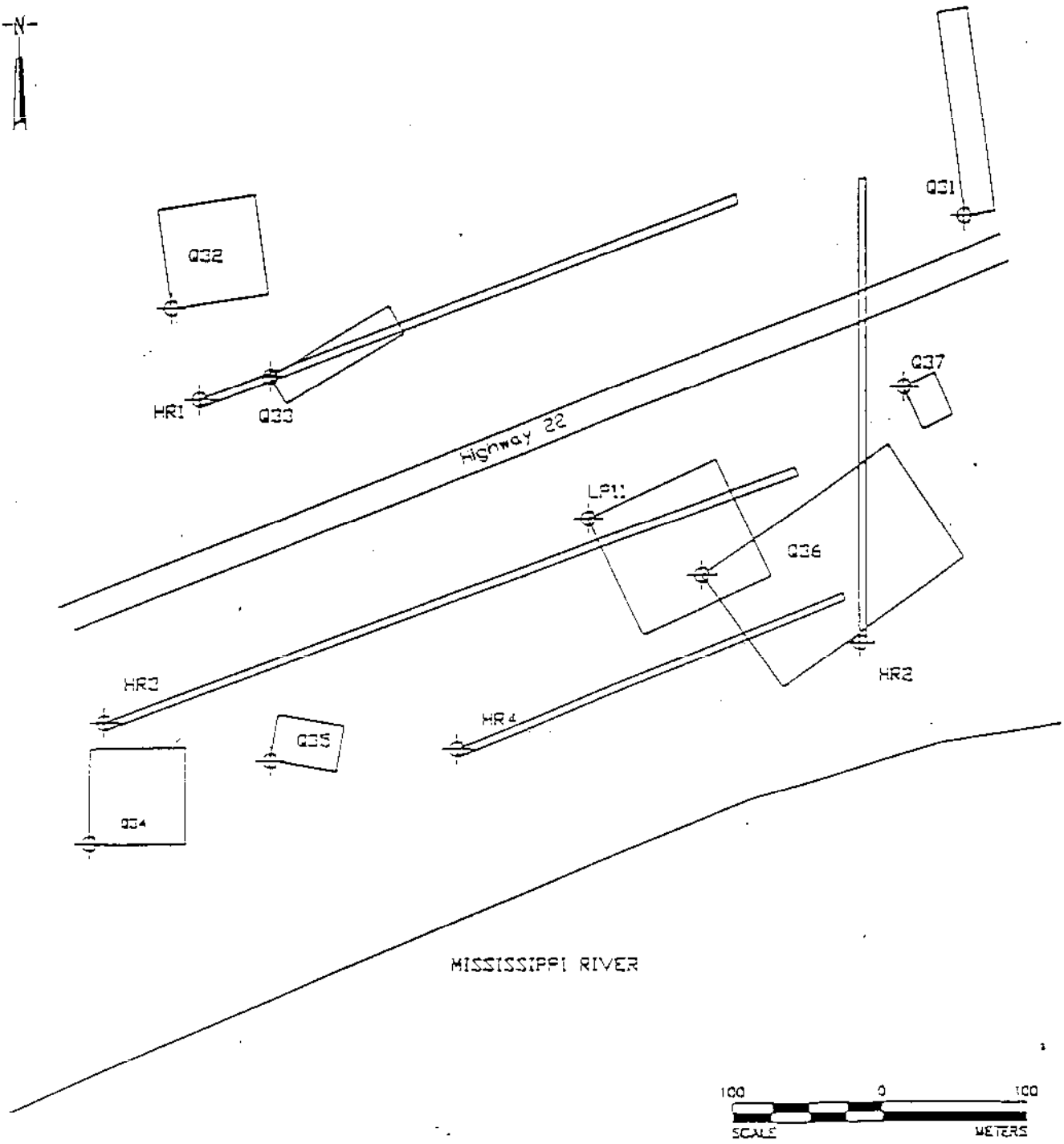
Pile ID*	Pile Base UTM (x) Kilometers	UTM (y) Kilometers	Angle of Rotation ***	Peak Dimension Meters	Height Feet	rIIs** Meters
Q31	693.682	4592.721	-8.0	21.36 x 134.1	20	2.84
Q32	693.151	4592.662	-8.0	65 x 65	10	1.4
Q33	693.217	4592.617	60.0	20.7 x 91.44	10	1.4
Q34	693.100	4592.304	0.0	64 x 64	20	2.8
Q35	693.217	4592.363	10.0	45.7 x 30.5	20	2.8
Q36	693.504	4592.485	55.0	91.44 x 152.4	40	5.7
Q37	693.640	4592.610	65.0	30.5 x 22.9	30	4.25
LP11	693.430	4592.523	65.0	85.34 x 91.44	30	4.25

*Q31 - Q37 are limestone storage piles, LP11 is the coal storage pile

**rIIs is the initial vertical dimension for a surface based area source where height is divided by 2.15 - Table 3-1, User's Guide for the ISC3 Dispersion Models, Volume 1 September, 1995.

***Angle of rotation refers to how the storage pile location is defined. The pile base location starts as the initial southwest corner and the pile i pivoted positively or negatively by the degrees shown around the pile base corner which is marked by the circle figure on the attached drawing.

January 1998



LEGEND

Q31-Q37 LIMESTONE STORAGE PILES
LP11 COAL PILE
HR1-HR4 HAUL ROADS

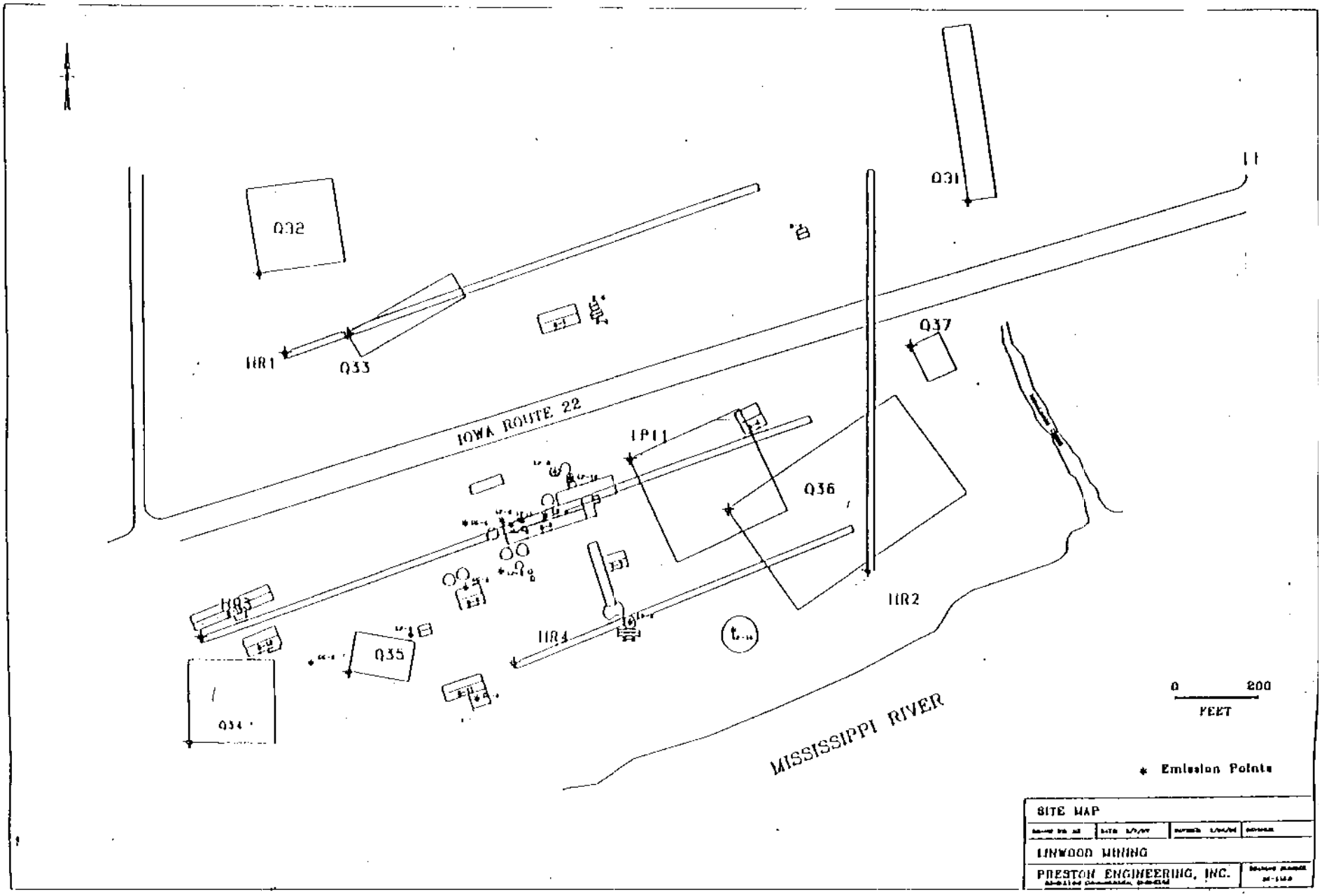
LINWOOD MINING AND MINERALS, BUFFALO, IOWA

DRAWN BY: SMS | DATE: 2/26/96 | REVISED: 1/8/96 | REVISED:

AREA SOURCES

PRESTON ENGINEERING INC.
CONSULTING ENVIRONMENTAL ENGINEERS

DRAWING NUMBER 96-513.25


Q32
Q31
Q33
Q37
HR1
IOWA ROUTE 22
IP11
Q36
HR2
HR3
HR4
Q35
Q34
MISSISSIPPI RIVER
0
200
FEET
* Emission Points
SITE MAP
LINWOOD MINING
PRESTON ENGINEERING, INC.

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: Linwood Mining & Minerals Corp.

Exhibit "D"

SPECIFIC LIMITS REQUESTED BY LINWOOD AFFECTING THE MODELING ANALYSIS

Table 5-1.. Linwood PM_{10} limit request.

Source Permit Number	Source Description	Current Allowable Emission Rate (gr/scf PM)	Requested PM_{10} Limit (Gr/scf)	Number
CC-1	Old Mill	0.1	0.01	71-A-84
CC-2	New Mill	0.01	0.005	86-A-049
CC-3	Calcium Loadout	0.1	0.01	88-A-218
CC-4	Scale Loadout	0.05	0.01	91-A-327
LP-1	Mezzanine Baghouse	0.1	0.02	71-A-82
LP-2	Hydrate Silo	0.1	0.01	71-A-83
LP-3	Bagging Tank	0.1	0.02	71-A-85
LP-5	Hydrator	0.1	0.05	78-A-321
LP-6	Hydrate Loadout	0.1	0.01	88-A-219
LP-7	Kiln Dust Tank	0.1	0.005	88-A-220
LP-8	North West System	0.1	0.005	88-A-221
LP-12	Fluorspar Bin Vent	0.1	0.01	97-A-1084

Exhibit "E"

Iowa DOT Agreement No. 94-16-068

AGREEMENT

County Scott

Project No. Iowa 22

Iowa DOT
Agreement No. 94-16-068

This AGREEMENT, made and entered into by and between the State of Iowa, Iowa Department of Transportation (herein DOT), and Linwood Mining & Minerals Corporation, an Iowa corporation, (hereafter COMPANY) as follows:

WITNESSETH; that

WHEREAS, the COMPANY and the DOT previously entered into Agreements for vehicles to cross Iowa Highway No. 22 in the City of Buffalo in Scott County, Iowa. The Agreements were signed by the COMPANY and the DOT on August 15 and September 3, 1987, and September 12 and 24, 1990, respectively, and;

WHEREAS, Chapter 321E, Code of Iowa, authorizes the Iowa Department of Transportation to issue special permits; and

WHEREAS, the DOT is willing to extend the terms of the Agreements to the COMPANY for the crossing of Iowa Highway No. 22 for the purpose of transporting limestone materials from the COMPANY's north side quarry to the south side of Iowa Highway No. 22, subject to the stipulation hereinafter set forth.

NOW THEREFORE, in consideration of these premises and the mutually dependent covenants herein contained, it is agreed as follows:

1. The COMPANY agrees that only one (1) point of ingress and one (1) point of egress, opposite one another at Station 290+75 shall be utilized in crossing Iowa Highway No 22 with the vehicles covered by special permit in accord with the terms of this Agreement.

2. The DOT shall furnish and install advance warning signs on Iowa Highway No. 22 in advance of the crossing in compliance with the Iowa Manual on Uniform Traffic Control Devices for Streets and Highways.

3. The COMPANY agrees to remove immediately any and all foreign material which may be deposited on the Iowa 22 roadbed as a result of the COMPANY's operations under this Agreement.

4. The COMPANY shall indemnify and save harmless the DOT and the State of Iowa from any and all causes of action, suits of law or in equity, or losses, damages, claims, or demands, and from all liability of whatsoever nature for and on account of or due to any error, omission or negligent act of the COMPANY, its members employees, agents, subcontractors, or assigns, arising out of or in connection with this Agreement of the performance of any part thereof or for any accident which may occur as a result of the COMPANY vehicles using the crossing.

5. If future rehabilitation at the crossing at Station 290+75 on Iowa Highway No. 22 becomes necessary, it is understood and agreed that the DOT shall have the responsibility of deciding the proper highway rehabilitation, including all phases thereof.

6. The DOT shall perform any required future rehabilitation work and will bill the COMPANY for the actual cost of that portion of the rehabilitation work attributed to the COMPANY's use of the crossing at Station 290+75 by vehicles covered by special permits.

7. The COMPANY agrees to reimburse the DOT for the actual cost of that portion of the rehabilitation at the crossing at Station 290+75 attributed to the COMPANY's use of the crossing by vehicles covered under specific permits. Failure by the COMPANY to reimburse the DOT shall cause cancellation of this Agreement by written notification to the COMPANY by the DOT. After the COMPANY's use of Iowa 22 under this Agreement has been terminated, the DOT will assess the roadway damage and bill the COMPANY for said costs based on the actual quantities in place and the accepted contract bid.

8. The DOT shall issue an annual permit(s) to the COMPANY upon application therefore for each vehicle used in transporting the limestone material over the crossing. The charge for the permit(s), payable in advance to the DOT, shall be at the then current rate per vehicle per year.

9. The terms of this Agreement shall be extended for a period of three (3) additional (consecutive) years. Prior to the expiration date, the COMPANY may, in writing, request that the Agreement be extended again.

10. The COMPANY agrees to comply with any and all provisions set forth in Chapter 321E, Code of Iowa, subject to exceptions set forth in the permits referred to in Item 8. Such exceptions will permit continued use of the type of equipment and procedures being used at the present time as established with the Iowa Department of Transportation during the right of way acquisition in 1973. Failure by the COMPANY to comply with said Code provisions or terms of this Agreement shall constitute sufficient cause for the DOT to void this Agreement immediately.

11. This Agreement may be executed in two counterparts, each of which so executed shall be deemed to be an original and both shall constitute but one and the same instrument.

IN WITNESS WHEREOF, each of the parties hereto has executed Agreement No. 94-16-068 as of the date shown opposite its signature below.

LINWOOD MINING & MINERALS CORPORATION

BY _____
President

On this 15 day of OCT., 1993, personally appeared duly sworn did say that he is PRESIDENT. of the Linwood Mining & Minerals Corporation and that said instrument was signed and executed by him in behalf of the said Corporation by authority of its Board of Directors as its voluntary act and deed.

_____
Notary Public in and for said State

Executed by the DOT this 31 day of Oct, 1993

IOWA DEPARTMENT OF TRANSPORTATION

BY _____
George F. Sisson
Deputy Director-Development
Highway Division

ATTEST:

BY _____

East Central Iowa Transportation Center
430 Sixteenth Avenue SW
P.O. Box 3150, Cedar Rapids, IA 52406-3150

319-364-0235
FAX: 319-364-9614

March 12, 1997

Re: Iowa 22
Scott County
Addendum 97-A-054

Gregory J. Bush
President
Linwood Mining and Minerals Corporation
4321 East 60th Street
Davenport, IA 52807-9744

SUBJECT: Hauling Operations on Iowa 22 - Linwood Mining & Minerals Corporation

Dear Mr. Bush:

Attached is your copy of the fully executed addendum to Agreement 94-16-068 between Linwood Mining & Minerals Corporation and the Iowa Department of Transportation for the above referenced project.

Thank you for your cooperation in the processing of this addendum.

Very truly yours,

Richard E. Kautz, P.E.
Local Systems Engineer

REK:keh
Attachment
cc: Doug Rick, Davenport AME with copy of addendum

STAFF ACTION NO. S-97-848

ADDENDUM TO AGREEMENT 94-16-068

County Scott

Linwood Mining & Minerals Corp.

Project No. Iowa 22

Iowa DOT
Addendum No. 97-A-054

IS AGREED between the State of Iowa, Iowa Department of Transportation (herein DOT), Project Development Division and the Linwood Mining & Minerals Corporation in Scott County, Iowa, (herein COMPANY) as follows:

1. The COMPANY is currently conducting hauling operations across Iowa 22 within the City of Buffalo for the purpose of transporting limestone materials from the COMPANY'S north side quarry to the south side of Iowa 22.

2. The COMPANY and DOT previously entered into Agreement 94-16-068 for the above referenced hauling operations. The Agreement was signed by the COMPANY and DOT on October 1 and 31, 1993 respectively.

3. The COMPANY, per an October 1, 1996 letter, has requested an extension of the agreement for hauling operations on Iowa 22 in the City of Buffalo in Scott County Iowa (see Exhibit A attached).

4. The terms and conditions contained in previously executed Agreement 94-16-068 (see section 2 above) shall be extended for a period of five (5) years. Prior to the expiration date, the COMPANY may, in writing, request that the Agreement be extended again. For the purpose of this Addendum, the "expiration date" shall be defined as; five (5) years subsequent to the date of the COMPANY'S signature on this Addendum.

5. All provisions contained in previously executed Agreement 94-16-068 which are not revised or in any way affected by this addendum shall remain in full force and effect.

6. If any section, provision, or part of this Addendum shall be found to be invalid or unconstitutional, such judgment shall not affect the validity of the

Addendum as a whole or any section, provision, or part thereof not found to be invalid or unconstitutional.

7. This Addendum may be executed in two counterparts, each of which so executed shall be deemed to be an original.

8. Any subsequent change or modification to the terms of this Addendum shall be in the form of a duly executed Amendment to this Addendum.

IN WITNESS WHEREOF, each of the parties hereto has executed Preconstruction greement No. 97-A-054 as of the date shown opposite its signature below.

LINWOOD MINING & MINERALS CORPORATION:

BY: _____
President

On this 24th Day of January, 1997, personally appeared duly sworn did say that he is President of the Linwood Mining & Minerals Corporation and that said instrument was signed and executed by him on behalf of said Corporation by authority of its Board of Directors as its voluntary act and deed.

_____
Notary Public in and for the State of Iowa

KAREN L LYONS
MY COMMISSION EXPIRES
12 19 98

IOWA DEPARTMENT OF TRANSPORTATION:

BY Neil Volmer 2/25 1997
Director, Maintenance Division Date

Attest: Ed Fawker

LINWOOD MINING & MINERALS CORP. 4321 EAST 60th STREET • DAVENPORT, IOWA 52807-9744

October 1, 1996

Douglas L. Rick, P.E.
Area Maintenance Engineer
Davenport Maintenance Office
Iowa Department of Transportation
P. O. Box 2646
Davenport, Iowa 52809

Dear Mr. Rick:

I am in receipt of the current Agreement between Linwood Mining & Minerals Corporation and the Iowa Department of Transportation regarding our firms crossing of [illegible] with overweight vehicles. After reviewing the contents of this Agreement, I am requesting it be renewed. Please make arrangements for appropriate processing and approvals.

If you need to discuss this matter further, please do not hesitate to contact me at 359-8251.

Sincerely,

LINWOOD MINING AND MINERALS CORPORATION

Gregory J. Bush
President

GJB:kll

cc: Bob Niemela, Plant Manager, Linwood Mining and Minerals Corp.

EPA Rulemakings

CFR: 40 C.F.R. 52.820(c)(54)(i)(A)(B)

FRM: 56 FR 56158 (11/1/91)

PRM: 56 FR 29918 (7/1/91)

State Submission: 3/13/91

State Proposal: none

State Final: none

APDB File: IA-29

Description: This revision approved Administrative Orders and revised permits for the Archer Daniels Midland wet corn milling facility and the Interstate Power M.L. Kapp electric utility steam generating facility.

CFR: 40 C.F.R. 52.820(c)(65)(i)(A)(B)(C)

FRM: 62 FR 63454 (12/1/97)

PRM: 62 FR 43681 (8/15/97)

State Submission: 6/13/96, 4/21/97

State Proposal: none

State Final: none

APDB File: IA-49

Description: This revision approved state permits and source specific emission limits and conditions for the Grain Processing Corporation, the Muscatine Power and Water Company, and Monsanto Corporation in Muscatine, Iowa.

CFR: 40 C.F.R. 52.820(d)

FRM: 64 FR 12087 (3/11/99)

PRM: 64 FR 12141 (3/1199)

State Submission: 9/11/98

State Proposal: 6/26/98

State Final: 7/20/98

APDB File: IA-67

Description: This revision approved an Administrative Consent Order for the IES Utilities, Inc. in Cedar Rapids area which provides for the attainment and maintenance of the SO_2 national ambient air quality standards (NAAQS).

Administrative Consent Orders

CFR: 40 C.F.R. 52.820(d)

FRM: 64 FR 13343 (3/18/99)

PRM: 64 FR 13378 (3/18/99)

State Submission: 10/1/98

State Proposal: 8/21/98

State Final: 9/21/98

APDB File: IA-55

Description: This revision approved two state Administrative Consent Orders for Linwood Corporation and Lafarge Corporation which provides for the attainment and maintenance of the particulate matter NAAQS in Buffalo, Iowa.

Difference Between the State and EPA-Approved Regulation:

None.