CARGILL
FERTILIZER, INC.

8813 Highway 41 South - Riverview, Florida 33569 - Telephone 813-677-9111 - TWX 810-876-0648 - Telex 52666 - FAX 813-671-6146

December 28, 2000

Hand Delivered

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JAN 12 2001
BUREAU OF AIR REGULATION

Mr. Jim McDonald
Air Permitting Engineer
Florida Department of Environmental Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619

Dear Mr. McDonald:

Re: Cargill Fertilizer, Inc. - Riverview Facility
FDEP File No. 0570008-030-AC
Solid/Molten Sulfur Handling and Storage Operation

This letter is a response to your letter dated November 22, 2000 in reference to the application that Cargill Fertilizer, Inc. submitted to construct a Molten Sulfur Truck Loading Operation at it's Riverview facility.

Included with this letter as Attachment 1 is updated application pages. The following is additional information requested numbered as appeared in your letter:

1. Yes, Table 3-6 and the subsequent deposition and ambient air quality analysis have been changed as a result of revised stack parameters for Scrubber Stack 1703. Notice, that as pointed out in comment 10 of your letter, there were some inconsistencies in the flow rates for Scrubber Stack 1703 presented in the revised application forms and those presented in the revised version of Table 3-3. The correct flows are as follows: 765 acfm (665 acfm for the tanks and an additional 100 acfm for the truck loading station), 522 dscfm (454 dscfm for the tanks and 68 dscfm for the truck loading station). Consequently, revised versions of Table 3-3, and Table 3-6 are included.

Also attached to this letter are the results of the revised air dispersion modeling and deposition analysis using the revised parameters for Scrubber Stack 1703 as presented in Table 3-6. Two operating scenarios were addressed in the modeling analysis. The first scenario simulated operations when one tank is being filled (ship unloading) and trucks were being filled at the loading station. At this time, the scrubber would be operating to control emissions from the tank and truck loading operation and the other two tanks would be at idle (PM emissions due to natural ventilation only). The second scenario simulated periods when all three tanks were idle (no ship unloading or truck loading).

The modeling analysis was performed in accordance with the procedures described in Section 5 of our original application date July 1999 with a few minor exceptions. First, the emissions inventory was revised to

include only the 3 existing molten sulfur tanks and Scrubber Stack 1703. Second, additional receptors were added along the facility property boundaries so the interval between receptors was 100 m or less. Finally, the potential downwash effects of buildings proposed as part of the solid sulfur portion of the application (solid sulfur storage building and melter building) were eliminated from the direction specific-downwash analysis since they will not be built as part of the revised molten sulfur project.

The results of the ambient air quality analysis is presented in attached Table 5-4. The results of the deposition analysis is presented in attached Table 5-6. The modeling files associated with this air dispersion modeling analysis have been forwarded to Cleve Holladay for review.

2. Please find attached Table 4-1, which has been revised to include only emission increases above current actual emissions for the proposed project (scrubber controlling emissions from the molten sulfur tanks with an increase in throughput of 800,000 TPY of molten sulfur and the truck loading station). Included in Table 4-1 are fugitive emissions from vehicular traffic associated with transportation of an additional 800,000 TPY of molten sulfur. Vehicular traffic emissions were calculated in accordance with the procedures described in 13.2.1 of AP-42. A summary of these calculations is presented in Attachment 2 of this letter.

The additional molten sulfur afforded by the proposed project will not be used at the Riverview facility, therefore this project cannot be viewed as "phased construction project."

The pits were not included in determining significant emissions increases from the project, because the additional molten sulfur afforded by the proposed project will be sent to the truck loading station and not be processed through the pits. Regardless, the pits are a minimal source of emissions and this project would not trigger PSD if they were included.

3. No. The changes in the newly revised Rule 62-212.600 F.A.C. only allowed for the use of best available data in calculating emissions from solid sulfur handling. As no solid sulfur will be handled as a result of this project, the revision of this rule does not affect Cargill's application.

4. See Attachment 3, Operational Procedures for Sulfur Ship Unloading. This operation is currently the only movable loading arm for molten sulfur transfer.

5. The response in the letter dated October 23, 2000, the total truck loading rate should have been expressed as 300 long tons per hour.

6. The scrubber will control ship unloading operations in addition to truck unloading operations. These two operations will be conducted simultaneously.

7. No. As emissions are reduced from those presented in the application during scrubber operation, Cargill sees no reason to limit its operation. Although the scrubber will only be necessary during times of ship unloading and truck loading, it is possible that it will be operating continuously, even during idle times.

8. The molten sulfur transfer rate from the tanks to the pits is measured and documented on a daily basis. The portion of this transfer rate from trucks would be a minimal impact in comparison to sulfur received from the tanks.

9. The actual emissions from the pits will not change because the increased throughput requested in this application will be directed to the truck loading station.

10. The manufacturer specification for the scrubber shows an estimated outlet of 626 acfm with an inlet of 765 acfm.

If you have any questions, please call me at (813) 671-6369 or email me at kathy_edgemon@cargill.com.

Sincerely,

Kathy Edgemon, P.E.
Environmental Superintendent

cc: Harman, HCEPC
Jellerson
File P-40-5

Attachment 1

Revised Application Pages

4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [ ], if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [X], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [ ], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

_____ _____

Signature Date

(seal)

* Attach any exception to certification statement.

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: **PM**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **1.68** lb/hour **2.12** tons/year
4. Synthetically Limited? [ ] Yes [**X**] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **See Part B, Table 3-3 (revised)**
7. Emission Method Code: [ ] 0 [ ] 1 [**X**] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Part B, Table 3-3 (revised)**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: **PM**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **1.68** lb/hour **2.12** tons/year
4. Synthetically Limited? [ ] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference:
7. Emission Method Code: [ ] 0 [ ] 1 [X] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Part B, Table 3-3 (revised)**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Assumed to be equivalent to PM emissions.**

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted:	**VOC**
2. Total Percent Efficiency of Control:	%
3. Potential Emissions:	**7.40** lb/hour **5.40** tons/year
4. Synthetically Limited?	[ ] Yes [**X**] No
5. Range of Estimated Fugitive/Other Emissions:	[ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor:	**See Part B**
Reference:	
7. Emission Method Code:	[ ] 0 [**X**] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters):	**See Part B, Table 3-3 (revised)**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):	

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted:	**H2S**
2. Total Percent Efficiency of Control:	%
3. Potential Emissions:	**3.63** lb/hour **4.98** tons/year
4. Synthetically Limited?	[ ] Yes [**X**] No
5. Range of Estimated Fugitive/Other Emissions:	[ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor:	**See Part B**
Reference:	
7. Emission Method Code:	[ ] 0 [**X**] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters):	**See Part B, Table 3-3 (revised)**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):	

Emission Unit Information Section 2 of 2

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted:	**SO2**
2. Total Percent Efficiency of Control:	%
3. Potential Emissions:	**7.58** lb/hour **10.38** tons/year
4. Synthetically Limited?	[ ] Yes [**X**] No
5. Range of Estimated Fugitive/Other Emissions:	[ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor:	**See Part B, Table 3-3 (revised)**
Reference:	
7. Emission Method Code:	[ ] 0 [**X**] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters):	**See Part B, Table 3-3 (revised)**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):	

Table 3-3 Summary of Emission Rate Calculations for the Molten Sulfur Handling System Based on a Proposed Emission Control System (Scrubber) and an Increase in the Ship Unloading Rate of 800,000 TPY of Molten Sulfur (Revised 12/07/00)

		Rebuilt Tank No. 1						Existing Tank No. 2						Existing Tank No. 3						Pit 7		Pit 8		Pit 9		Truck Loading Station
Parameters	Units	Loading from Ship(d)	Tank No. 2 or 3 Loading from Ship(e)	Unloading Into Pit(f)	Storage/ Idle(g)	Total Emissions (TPY)	Max Emissions (lb/hr)	Loading from Ship(d)	Tank No. 1 or 3 Loading from Ship(e)	Unloading Into Pit(f)	Storage/ Idle(g)	Total Emissions (TPY)	Max Emissions (lb/hr)	Loading from Ship(d)	Tank No. 1 or 2 Loading from Ship(e)	Unloading Into Pit(f)	Storage/ Idle(g)	Total Emissions (TPY)	Max Emissions (lb/hr)	Loading	Unloading/ Idle	Loading	Unloading/ Idle	Loading	Unloading/ Idle	Loading
SULFUR FLOW RATES																										
Maximum loading rate	TPH	2,240	0	336	0			2,240	0	336	0			2,240	0	336	0			336	0	336	0	336	0	336
Annual loading rate	TPY	759,027	0	492,361	0			759,027	0	492,361	0			759,027	0	492,361	0			492,361	0	492,361	0	492,361	0	800,000
VENTILATION RATES																										
Loading/Unloading	dscfm	454	0	151	151			454	0	151	151			454	0	151	151			100	0	100	0	100	0	68
Natural Ventilation through vents	dscfm	0	30	30	30			0	30	30	30			0	30	30	30			0	5	0	5	0	5	0
TRANSFER TIMES																										
Loading/Unloading	hr/yr	339	--	1,465	--			339	--	1,465	--			339	--	1,465	--			1,465	--	1,465	--	1,465	--	2,381
Idle	hr/yr	--	678	--	6,278			--	678	--	6,278			--	678	--	6,278			--	7,295	--	7,295	--	7,295	--
Operating	hr/yr	--	--	--	--			--	--	--	--			--	--	--	--			--	--	--	--	--	--	--
EMISSION FACTORS																										
Sulfur particulate(a)	grains/dscf	0.03	0.29	0.29	0.29			0.03	0.29	0.29	0.29			0.03	0.29	0.29	0.29			0.51	0.29	0.51	0.29	0.51	0.29	0.03
TRS (as H_2S)	lb/dscf	3.50E-05	3.50E-05	3.50E-05	3.50E-05			3.50E-05	3.50E-05	3.50E-05	3.50E-05			3.50E-05	3.50E-05	3.50E-05	3.50E-05			3.50E-05	3.50E-05	3.50E-05	3.50E-05	3.50E-05	3.50E-05	3.50E-05
SO_2	lb/dscf	7.30E-05	7.30E-05	7.30E-05	7.30E-05			7.30E-05	7.30E-05	7.30E-05	7.30E-05			7.30E-05	7.30E-05	7.30E-05	7.30E-05			7.30E-05	7.30E-05	7.30E-05	7.30E-05	7.30E-05	7.30E-05	7.30E-05
VOC	lb/dscf	5.20E-05	5.20E-05	5.20E-05	5.20E-05			5.20E-05	5.20E-05	5.20E-05	5.20E-05			5.20E-05	5.20E-05	5.20E-05	5.20E-05			5.20E-05	5.20E-05	5.20E-05	5.20E-05	5.20E-05	5.20E-05	5.20E-05
CONTROL EFFICIENCY																										
Sulfur particulate	%	(b)	0	0	0			(b)	0	0	0			(b)	0	0	0			(c)	(c)	(c)	(c)	(c)	(c)	(a)
TRS (as H_2S)	%	0	0	0	0			0	0	0	0			0	0	0	0			(c)	(c)	(c)	(c)	(c)	(c)	0
SO_2	%	0	0	0	0			0	0	0	0			0	0	0	0			(c)	(c)	(c)	(c)	(c)	(c)	0
VOC	%	0	0	0	0			0	0	0	0			0	0	0	0			(c)	(c)	(c)	(c)	(c)	(c)	0
EMISSION RATES						Annual Emission Rate (TPY)	Maximum Hourly Emission Rate (lb/hr)					Annual Emission Rate (TPY)	Maximum Hourly Emission Rate (lb/hr)					Annual Emission Rate (TPY)	Maximum Hourly Emission Rate (lb/hr)							
Sulfur Particulate	lb/hr	0.12	0.075	0.075	0.075	--	0.12	0.12	0.075	0.075	0.075	--	0.12	0.12	0.075	0.075	0.075	--	0.12	0.44	0.012	0.44	0.012	0.44	0.012	0.017
	TPY	0.020	0.025	0.055	0.23	0.33	--	0.020	0.025	0.055	0.23	0.33	--	0.020	0.025	0.055	0.23	0.33	--	0.32	0.045	0.32	0.045	0.32	0.045	0.021
TRS (as H_2S)	lb/hr	0.95	0.063	0.32	0.32	--	0.95	0.95	0.063	0.32	0.32	--	0.95	0.95	0.063	0.32	0.32	--	0.95	0.21	0.011	0.21	0.011	0.21	0.011	0.14
	TPY	0.16	0.021	0.23	1.00	1.41	--	0.16	0.021	0.23	1.00	1.41	--	0.16	0.021	0.23	1.00	1.41	--	0.15	0.038	0.15	0.038	0.15	0.038	0.17
Sulfur Dioxide	lb/hr	1.99	0.13	0.66	0.66	--	1.99	1.99	0.13	0.66	0.66	--	1.99	1.99	0.13	0.66	0.66	--	1.99	0.44	0.022	0.44	0.022	0.44	0.022	0.30
	TPY	0.34	0.045	0.48	2.08	2.94	--	0.34	0.045	0.48	2.08	2.94	--	0.34	0.045	0.48	2.08	2.94	--	0.32	0.080	0.32	0.080	0.32	0.080	0.35
Volatile Organic Compounds	lb/hr	1.42	0.094	0.47	0.47	--	1.42	1.42	0.094	0.47	0.47	--	1.42	1.42	0.094	0.47	0.47	--	1.42	0.31	0.016	0.31	0.016	0.31	0.016	0.21
	TPY	0.24	0.032	0.35	1.48	2.10	--	0.24	0.032	0.35	1.48	2.10	--	0.24	0.032	0.35	1.48	2.10	--	0.23	0.057	0.23	0.057	0.23	0.057	0.25

Notes:
Total Sulfur Throughput = 2,277,083 tons/yr
Total Sulfur to Each Pit = 492,361 tons/yr (equivalent to current permit limit of 446,667 tonnes per year)
Total Sulfur to Truck Loading Station = 800,000 tons/yr
TPH = tons per hour
TPY = tons per year
Density of Sulfur (280°F) = 112 lb/cf

Footnotes:
(a) Emission factor resulting in highest emission rate (worst case) depending on exhaust flow rate of given operation.
(b) Emission rate based on an controlled grain loading of 0.03 grains per dscf.
(c) Proposed scrubber does not control emissions from this source.
(d) Operational scenario ocurring when molten sulfur is loaded from a ship to a tank.
(e) Operational scenairo ocurring when molten sulfur is being loaded to either of the other tanks and the given tank is vented naturally.
(f) Operational scenario ocurring when a tank is unloading to the pit and emissions may or may not be controlled by the scrubber. Pollutant emissions were calcfated using worst case conditions (PM during natural ventilation and other pollutants during scrubbing).
(g) Operational scenario ocurring when the tank is at idle and may or may not be controlled by the scrubber. Pollutant emissions were calcfated using worst case conditions (PM during natural ventilation and other pollutants during scrubbing).

Total Emission Rates from Molten Sulfur Storage Tanks and Truck Loading Station	Total Annual Emission Rate (TPY)	Maximum Hourly Emission Rate (lb/hr)
Sulfur Particulates	1.02	0.37
TRS (as H_2S)	4.40	3.00
Sulfur Dioxide	9.18	6.26
Volatile Organic Compounds	6.54	4.46

Total Emission Rates from All Sources	Total Annual Emission Rate (TPY)	Maximum Hourly Emission Rate (lb/hr)
Sulfur Particulates	2.12	1.68
TRS (as H_2S)	4.98	3.63
Sulfur Dioxide	10.38	7.58
Volatile Organic Compounds	7.40	5.40

Table 3-6. Summary of Source Parameters Used for the Deposition and Ambient Air Quality Standards Analysis

Source Description	Source Map Location Number	Modeled Source Number	Source Type	Release Orientation	Release Elevation (feet)	Stack Diameter (feet)	Exhaust Temperature (degrees F)	Exhaust Flow (acfm)	Exhaust Velocity (ft/sec)	Volume Source Dimensions (ft)			Maximum PM Emission Rate (lb/hr)	Maximum PM_{10} Emission Rate (lb/hr)	Deposition PM Emission Rate (lb/hr)
										Length	Width	Height			
Molten Storage Tank No. 1		MLTTANK1	Volume	N/A	36	N/A	N/A	N/A	N/A	125	125	72	0.075	0.075	0.075
Molten Storage Tank No. 2		MLTTANK2	Volume	N/A	36	N/A	N/A	N/A	N/A	125	125	72	0.075	0.075	0.075
Molten Storage Tank No. 3		MLTTANK3	Volume	N/A	36	N/A	N/A	N/A	N/A	125	125	72	0.075	0.075	0.075
Molten Storage/Truck Loading Scrubber Stack (1703)		MLTSCRB	Point	Vertical	30	0.82	110	756	23.87	N/A	N/A	N/A	0.12	0.12	0.12

Table 4-1. PSD Source Applicability Analysis

Source Description	Potential Emission Rate (TPY) PM	PM_{10}	SO_2	NO_x	TRS	VOC
Current Actual Emission Rate						
Molten Sulfur Facility						
Existing Molten Sulfur Tanks	1.4	1.4	1.7	--	0.8	1.2
Proposed Potential Emission Rate						
Molten Sulfur Facility						
Molten Sulfur Tanks & Truck Loading Station Scrubber	1.0	1.0	9.2	--	4.4	6.5
Fugitive Emissions						
Vehicular Traffic (Molten Sulfur Transportation)	12.0	12.0	--	--	--	--
Total Project Emissions	11.7	11.7	7.5	0.0	3.6	5.3
PSD Applicability Threshold	25	15	40	40	10	40
PSD Review Triggered?	No	No	No	No	No	No

Attachment 2

Summary of Fugitive PM Emission Rate Calculations for Increases in Vehicular Road Traffic Associated with the Project

Cargill - Riverview
Fugitive PM Emissions from Truck Traffic

Based on Equation 1 of Section 13.2.1 of AP-42 (October 1997), estimated fugitive particulate emissions from the truck traffic involved in distributing molten sulfur are calculated as follows:

$$E = k\,(sL/2)^{0.65}\,(W/3)^{1.5}$$

Where:

- **E =** particulate emission factor [pounds per vehicle mile traveled (VMT)]
- **k =** base emission factor for particle size range and units of interest
- **sL =** road surface loading (grams per square meter)
- **W =** average weight (tons) of vehicles traveling the road

For this calculation,

- **k** = 0.016 lb/VMT (from Table 13.2-1.1 for PM10 in units of lb/VMT)
- **sL =** 0.4 g/m2 (from Table 13.2.2.1-2 for light traffic [<5,000 vehicles per day] on public paved roads
- **W =** 28 tons (based on the average weight of loaded trucks [40 tons] and unloaded trucks [16 tons].

A value of 1.0 g/m^3 (representative for surface loading of industrial roads) was selected for sL.

The emission factor, E, is calculated as follows:

$$E = 0.016\,(1.0/2)^{0.65}\,(28/3)^{1.5} = 0.29 \text{ lb/VMT}$$

The annual number of vehicle miles traveled is calculated using the following information:

Length of the haul road (roundtrip) = 1.24 miles
Number of vehicles = 800,000 tons molten sulfur produced / 24 tons (capacity of a molten sulfur truck)
= 33,333 vehicles

VMT = Roundtrip Length of the Haul Road x Number of Vehicles
= 1.24 miles x 2 x 33,333 vehicles
= 82,667 miles

Annual particulate matter emissions are calculated as follows:

particulate matter Emissions (TPY) = E x VMT
= 0.29 lb/VMT x 82,667 miles / 2000 lb/ton
= 12.0TPY

Attachment 3

Operational Procedures for Sulfur Ship Unloading

Table 5-4. Maximum Predicted PM_{10} Concentrations in the Vicinity of the Cargill Plant Due to the Molten Sulfur Tanks

Averaging Time	Concentration ($\mu g/m^3$)	Receptor Location[a] Direction (degrees)	Receptor Location[a] Distance (m)	Period Ending (YYMMDDHH)
Scenario 1: Scrubber with Two Tanks at Idle				
Annual	0.23	174	345	87123124
	0.35	203	410	88123124
	0.58	203	410	89123124
	0.23	203	410	90123124
	0.22	174	345	91123124
High 24-Hour	2.65	159	309	87040824
	3.67	203	410	88121324
	5.67	203	410	89030724
	3.88	203	410	90112524
	3.21	174	345	91081724
Scenario 2: Three Tanks at Idle				
Annual	0.21	174	345	87123124
	0.30	203	410	88123124
	0.49	203	410	89123124
	0.21	174	345	90123124
	0.21	174	345	91123124
High 24-Hour	2.46	174	345	87040624
	3.19	174	345	88042824
	5.44	203	410	89030724
	3.33	203	510	90111924
	2.95	174	345	91021124

Note: YY = Year, MM = Month, DD = Day, HH = Hour.

[a]All receptor coordinates are reported with respect to the No. 9 H_2SO_4 stack location.

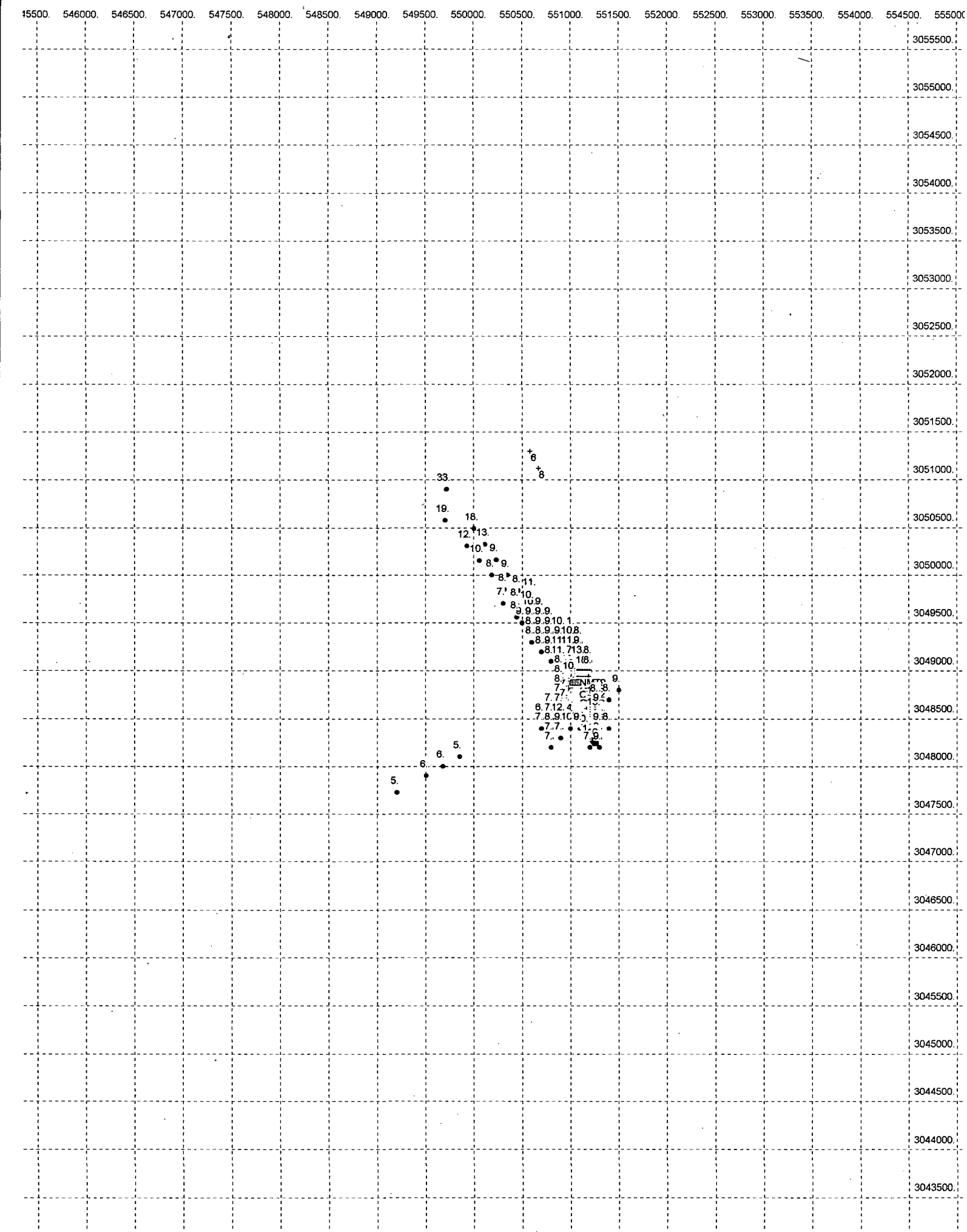
800,000

Table 5-6. Maximum Predicted PM_{10} Deposition Rate in the Vicinity of the Cargill Plant Due to the Molten Sulfur Tanks

Averaging Time	Depositions (g/m^2)	Receptor Location[a] Direction (degrees)	Receptor Location[a] Distance (m)	Period Ending (YYMMDDHH)
Scenario 1: Scrubber with Two Tanks at Idle				
Annual	72.5	190	363	87123124
	115.0	203	410	88123124
	177.0	203	410	89123124
	68.3	203	410	90123124
	61.4	203	410	91123124
Monthly	14.7	203	410	87103124
	21.0	203	410	88123124
	26.9	203	410	89103124
	15.3	203	410	90113024
	14.7	203	410	91113024
Scenario 2: Three Tanks at Idle				
Annual	54.2	190	363	87123124
	80.2	203	410	88123124
	122.2	203	410	89123124
	46.2	190	363	90123124
	43.5	203	410	91123124
Monthly	9.5	174	345	87043024
	12.7	203	410	88113024
	18.3	203	410	89123124
	10.2	203	410	90013124
	10.0	203	410	91123124

Note: YY = Year, MM = Month, DD = Day, HH = Hour.

[a]All receptor coordinates are reported with respect to the No. 9 H_2SO_4 stack location.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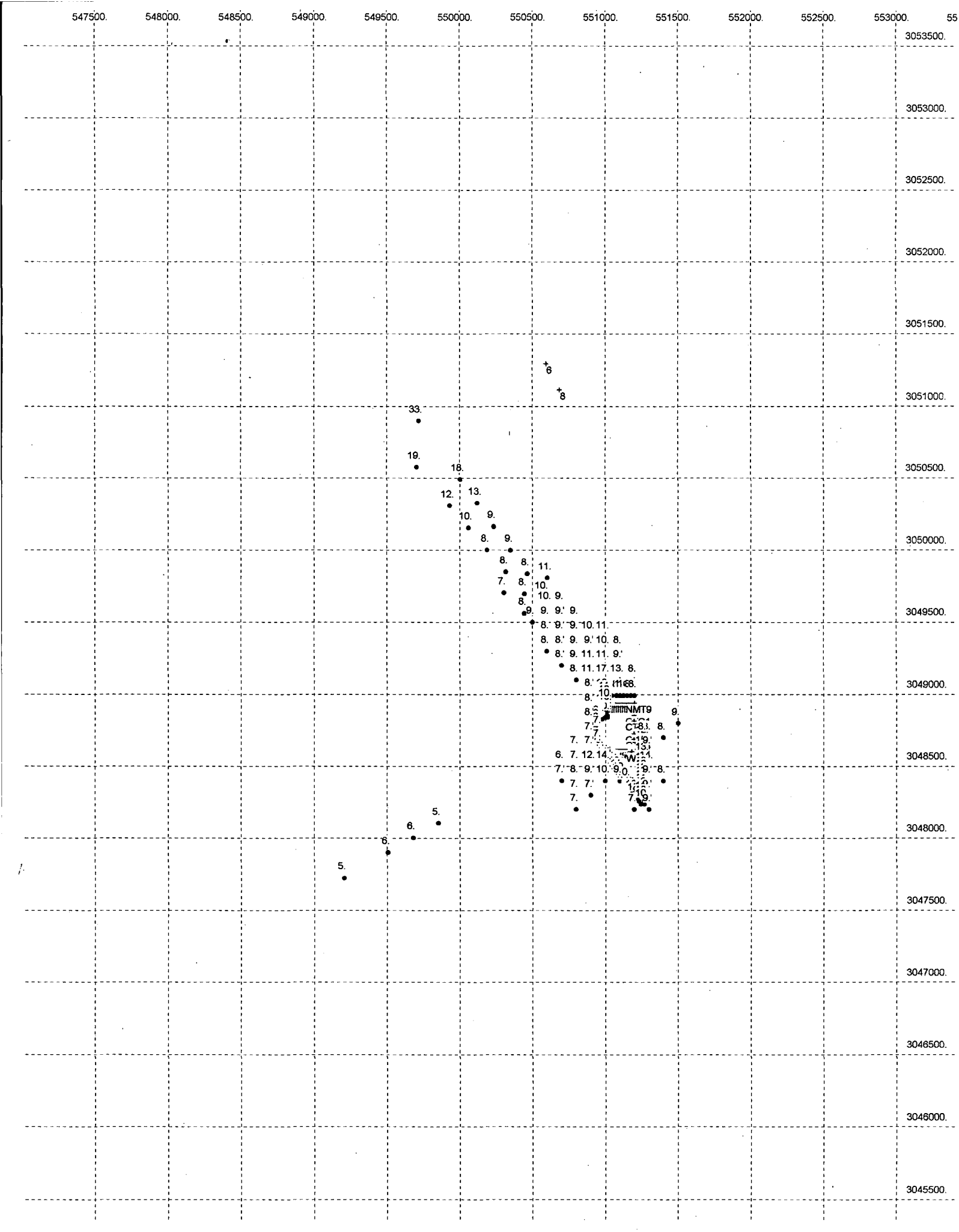
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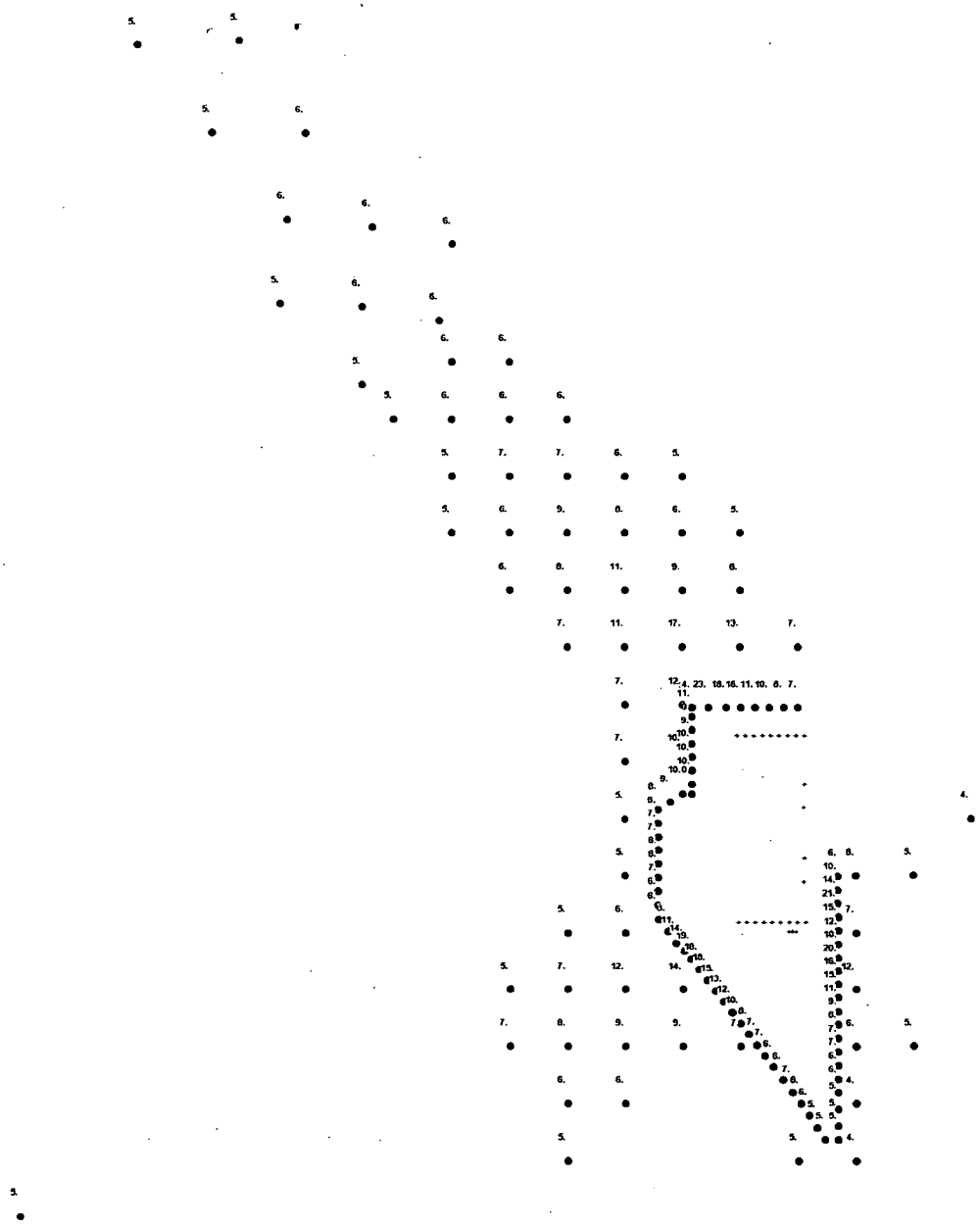

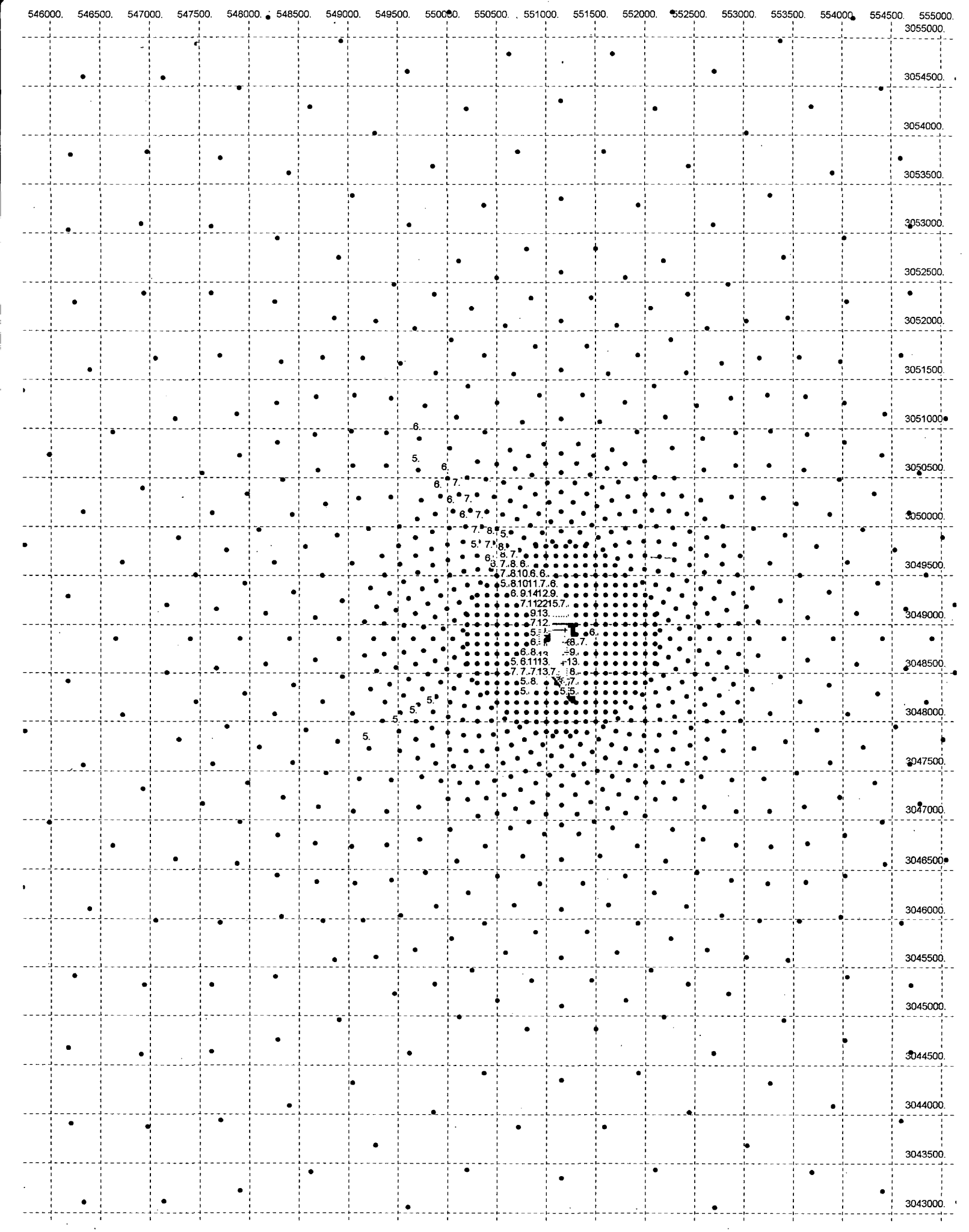
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