



## FACILITY PERMIT TO OPERATE

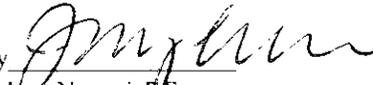
**BKK CORP (EIS USE)  
2210 S AZUSA AVE  
WEST COVINA, CA 91792**

### NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env.  
EXECUTIVE OFFICER

By   
Mohsen Nazemi, P.E.  
Deputy Executive Officer  
Engineering & Compliance



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

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**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

**SECTION A: FACILITY INFORMATION**

**LEGAL OWNER &/OR OPERATOR:** BKK CORP (EIS USE)

**LEGAL OPERATOR (if different than owner):**

**EQUIPMENT LOCATION:** 2210 S AZUSA AVE  
WEST COVINA, CA 91792

**MAILING ADDRESS:** 2210 S AZUSA AVE  
WEST COVINA, CA 91792

**RESPONSIBLE OFFICIAL:** KRIS L. KAZARIAN

**TITLE:** TREASURER

**TELEPHONE NUMBER:** (626) 965-0911

**CONTACT PERSON:** KELLY P. MCGREGOR

**TITLE:** AGENT FOR BKK LANDFILL, BAS  
COSTRUCTION

**TELEPHONE NUMBER:** (626) 965-0911

**TITLE V PERMIT ISSUED:** March 16, 2012

**TITLE V PERMIT EXPIRATION DATE:** March 15, 2017

<b>TITLE V</b>	<b>RECLAIM</b>
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<b>YES</b>	<b>NOx:</b>	<b>NO</b>
	<b>SOx:</b>	<b>NO</b>
	<b>CYCLE:</b>	<b>0</b>
	<b>ZONE:</b>	<b>INLAND</b>



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
21865 Copley Drive, Diamond Bar, CA 91765

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Facility ID:		800209
Revision #:		1
Date:		March 16, 2012

AQMD

**FACILITY PERMIT TO OPERATE  
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**SECTION B: RECLAIM ANNUAL EMISSION ALLOCATION**

NOT APPLICABLE



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**FACILITY PERMIT TO OPERATE  
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**SECTION C: FACILITY PLOT PLAN**

(TO BE DEVELOPED)



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**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

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**Facility Equipment and Requirements  
(Section D)**

This section consists of a table listing all permitted equipment at the facility, facility wide requirements, all individual Permits to Construct and Permits to Operate issued to various equipment at the facility, and Rule 219-exempt equipment subject to source-specific requirements. Each permit and Rule 219-exempt equipment will list operating conditions including periodic monitoring requirements, and applicable emission limits and requirements that the equipment is subject to. Also included is the rule origin and authority of each emission limit and permit condition.



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### PERMITTED EQUIPMENT LIST

THE FOLLOWING IS A LIST OF ALL PERMITS TO CONSTRUCT AND PERMITS TO OPERATE AT THIS FACILITY:

Application Number	Permit to Operate Number	Equipment Description	Page No.
204497	D13238	FUEL OIL STORAGE TANK AND DISPENSING FACILITY	5
266553	M99097	GASOLINE STORAGE TANK AND DISPENSING FACILITY	6
291635	D82565	I C E (>500 HP) EMERGENCY GEN-DIESEL	8
294939	R-D84837	I C E (50-500 HP) EMERGENCY GEN-DIESEL	10
299896	D91681	LANDFILL GAS FLARING SYSTEM NO. 2	12
299897	F7264	LANDFILL GAS FLARING SYSTEM NO. 1	19
300383	D90787	LANDFILL GAS COLLECTION (>50 WELLS)	24
318138	F8782	LANDFILL GAS COLLECTION (<10 WELLS)	29
338917	F16829	LANDFILL CONDENSATE LEACHATE COLLECTION	31
353233	F25256	LANDFILL GAS COLLECTION (>50 WELLS)	33
463215	F89452	I C E (50-500 HP) EMERGENCY GEN-DIESEL	37
526097	G16802	LANDFILL GAS LEACHATE AND CONDENSATE TREATMENT	39

**NOTE:** EQUIPMENT LISTED ABOVE THAT HAVE NO CORRESPONDING PERMITS TO OPERATE NUMBER ARE ISSUED PERMITS TO CONSTRUCT. THE ISSUANCE OR DENIAL OF THEIR PERMITS TO OPERATE IS SUBJECT TO ENGINEERING FINAL REVIEW. ANY OTHER APPLICATIONS THAT ARE STILL BEING PROCESSED AND HAVE NOT BEEN ISSUED PERMITS TO CONSTRUCT OR PERMITS TO OPERATE WILL NOT BE FOUND IN THIS TITLE V PERMIT.



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### FACILITY WIDE CONDITION(S)

**Condition(s):**

1. EXCEPT FOR OPEN ABRASIVE BLASTING OPERATIONS, THE OPERATOR SHALL NOT DISCHARGE INTO THE ATMOSPHERE FROM ANY SINGLE SOURCE OF EMISSIONS WHATSOEVER ANY AIR CONTAMINANT FOR A PERIOD OR PERIODS AGGREGATING MORE THAN THREE MINUTES IN ANY ONE HOUR WHICH IS:
  - A. AS DARK OR DARKER IN SHADE AS THAT DESIGNATED NO. 1 ON THE RINGLEMANN CHART, AS PUBLISHED BY THE UNITED STATES BUREAU OF MINES; OR
  - B. OF SUCH OPACITY AS TO OBSCURE AN OBSERVER'S VIEW TO A DEGREE EQUAL TO OR GREATER THAN DOES SMOKE DESCRIBED IN SUBPARAGRAPH (A) OF THIS CONDITION.  
[RULE 401]
2. THE OPERATOR SHALL NOT USE FUEL OIL CONTAINING SULFUR COMPOUNDS IN EXCESS OF 0.05 PERCENT BY WEIGHT. ON OR AFTER JUNE 1, 2004, A PERSON SHALL NOT PURCHASE ANY DIESEL FUEL FOR STATIONARY SOURCE APPLICATION IN THE DISTRICT, UNLESS THE FUEL IS LOW SULFUR DIESEL FOR WHICH THE SULFUR CONTENT SHALL NOT EXCEED 15 PPM BY WEIGHT AS SUPPLIED BY THE SUPPLIER.  
[RULE 431.2]
3. THE OPERATOR SHALL NOT USE LANDFILL GAS CONTAINING SULFUR COMPOUNDS IN EXCESS OF 150 PPMV CALCULATED AS HYDROGEN SULFIDE AVERAGED DAILY OR AS SPECIFIED IN RULE 431.1 ALTERNATIVE MONITORING PLAN.  
[RULE 431.1]
4. THE OWNER/OPERATOR OF A MSW LANDFILL SHALL COMPLY WITH THE FOLLOWING:
  - A. INSTALL AND OPERATE A WIND SPEED AND DIRECTION MONITORING SYSTEM WITH A CONTINUOUS RECORDER. FOR WIND SPEED, USE A 3 CUP ASSEMBLY WITH A RANGE OF 0 TO 50 MILES AN HOUR, WITH A THRESHOLD OF 0.75 MILE PER HOUR OR LESS. FOR WIND DIRECTION, USE A VANE WITH A RANGE OF 0 TO 540 DEGREES AZIMUTH, WITH A THRESHOLD OF PLUS-MINUS 2 DEGREES. AN APPROVED ALTERNATIVE MAY BE USED IN LIEU OF THE ABOVE.  
[RULE 1150.1]
  - B. MONITOR AND COLLECT MONTHLY, OR AS PER THE APPROVED 1150.1 ALTERNATIVE, SAMPLES FOR ANALYSIS OF TOC AND TAC FROM THE SUBSURFACE REFUSE BOUNDARY SAMPLING PROBES.  
[RULE 1150.1]
  - C. OPERATE THE GAS COLLECTION AND CONTROL SYSTEM TO PREVENT THE CONCENTRATION OF TOC MEASURED AS METHANE FROM EXCEEDING 5% BY VOLUME IN THE SUBSURFACE REFUSE BOUNDARY SAMPLING PROBES.  
[RULE 1150.1]



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- D. COLLECT MONTHLY, OR AS PER THE APPROVED 1150.1 ALTERNATIVE, INTEGRATED SAMPLES FOR ANALYSIS OF TOC AND TAC FROM THE LANDFILL SURFACE.  
[RULE 1150.1]
- E. OPERATE THE GAS COLLECTION AND CONTROL SYSTEM TO PREVENT THE CONCENTRATION OF TOC MEASURED AS METHANE FROM EXCEEDING 25 PPMV AS DETERMINED BY INTEGRATED SAMPLES TAKEN ON NUMBERED 50,000 SQUARE FOOT LANDFILL GRIDS OR AS PER THE APPROVED 1150.1 ALTERNATIVE  
[RULE 1150.1]
- F. MONITOR QUARTERLY, OR AS PER THE APPROVED 1150.1 ALTERNATIVE, THE LANDFILL SURFACE FOR TOC.  
[RULE 1150.1]
- G. OPERATE THE GAS COLLECTION AND CONTROL SYSTEM TO PREVENT THE CONCENTRATION OF TOC MEASURED AS METHANE FROM EXCEEDING 500 PPMV ABOVE BACKGROUND AS DETERMINED BY INSTANTANEOUS MONITORING AT ANY LOCATION ON THE LANDFILL, EXCEPT AT THE OUTLET OF ANY CONTROL DEVICE.  
[RULE 1150.1]
- H. OPERATE THE GAS COLLECTION AND CONTROL SYSTEM SO THAT THERE ARE NO LEAKS THAT EXCEED 500 PPMV TOC MEASURED AS METHANE AT ANY COMPONENT UNDER POSITIVE PRESSURE.  
[RULE 1150.1]
- I. COLLECT MONTHLY, OR AS PER THE APPROVED 1150.1 ALTERNATIVE, LANDFILL GAS SAMPLES FOR ANALYSIS OF TOC AND TAC FROM THE MAIN GAS COLLECTION HEADER LINE ENTERING THE GAS TREATMENT AND/OR GAS CONTROL SYSTEM.  
[RULE 1150.1]
- J. COLLECT MONTHLY, OR AS PER THE APPROVED 1150.1 ALTERNATIVE, AMBIENT AIR SAMPLES FOR ANALYSIS OF TOC AND TAC FROM THE LANDFILL PROPERTY BOUNDARY.  
[RULE 1150.1]
- K. OPERATE THE GAS COLLECTION AND CONTROL SYSTEM AT ALL TIMES FOR LANDFILLS WITH ACTIVE COLLECTION SYSTEMS.  
[RULE 1150.1]
- L. OPERATE ALL WELLHEADS SO THE GAUGE PRESSURE IS UNDER A CONSTANT VACUUM, EXCEPT DURING WELL HEAD RAISING AND/OR REPAIR AND TEMPORARY SHUTDOWN DUE TO A CATASTROPHIC EVENT.  
[RULE 1150.1]



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**PERMIT TO OPERATE**

**Permit No. D13238  
A/N 204497**

**Equipment Description:**

STORAGE TANK, DIESEL FUEL OIL NO. 2, ABOVEGROUND TYPE, 50000 GALLON CAPACITY, 12'- 0" DIA.  
X 60'- 0" L.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE OPERATOR SHALL NOT STORE IN THIS EQUIPMENT ANY ORGANIC LIQUID HAVING A TRUE VAPOR PRESSURE OF 25.8 mm Hg (0.5 PSI) ABSOLUTE OR GREATER UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 463]

**Periodic Monitoring:**

4. THE OPERATOR SHALL KEEP RECORDS OF PURCHASE RECEIPTS FOR MATERIALS STORED IN THIS EQUIPMENT IN ORDER TO DEMONSTRATE COMPLIANCE WITH CONDITION NO. 3.



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### PERMIT TO OPERATE

Permit No. M99097  
A/N 266553

#### Equipment Description:

1. 1 - GASOLINE DISPENSING NOZZLE, EQUIPPED WITH PHASE II VAPOR RECOVERY SYSTEM, BALANCE RETRACTOR.
2. 1 - GASOLINE UNDERGROUND STORAGE TANK, 10,000-GALLON CAPACITY, EQUIPPED WITH PHASE I VAPOR RECOVERY SYSTEM, 1 METHANOL COMPATIBLE.

#### Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THE PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE MAXIMUM AMOUNT OF GASOLINE TRANSFERRED INTO THE GASOLINE STORAGE TANKS SHALL NOT EXCEED 6300 GALLONS PER MONTH OR 75000 GALLONS PER YEAR.  
[RULE 1303(b)(2)-OFFSET; RULE 1401]
4. (EXCEPT FOR DIESEL TRANSFERS) PHASE I VAPOR RECOVERY SYSTEMS SHALL BE IN FULL OPERATION WHENEVER THE UNDERGROUND TANK(S) IS(ARE) BEING FILLED. THIS SYSTEM SHALL BE INSTALLED, OPERATED AND MAINTAINED TO MEET ALL CARB CERTIFICATION REQUIREMENTS.  
[RULE 461]
5. (EXCEPT FOR DIESEL TRANSFER) A PHASE II VAPOR RECOVERY SYSTEM SHALL BE IN FULL OPERATION WHENEVER GASOLINE FROM UNDERGROUND TANK(S) IS DISPENSED TO MOTOR VEHICLES AS DEFINED IN RULE 461. THIS SYSTEM SHALL BE INSTALLED, OPERATED, AND MAINTAINED TO MEET ALL CARB CERTIFICATION REQUIREMENTS.  
[RULE 461]
6. RECORDS OF THE MONTHLY AND ANNUAL FUEL RECEIVED SHALL BE MAINTAINED FOR A PERIOD OF FIVE YEARS AND MADE AVAILABLE TO THE AQMD PERSONNEL UPON REQUEST.  
[RULE 204; RULE 461]
7. THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF RULE 461.  
[RULE 461]



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8. THE PHASE II VAPOR RECOVERY SYSTEMS SHALL BE INSTALLED, OPERATED, AND MAINTAINED SUCH THAT THE MAXIMUM ALLOWABLE PRESSURE DROP THROUGH THE SYSTEM INCLUDING NOZZLE, VAPOR HOSE, SWIVELS, AND UNDERGROUND PIPING DOES NOT EXCEED THE DYNAMIC BACK PRESSURE RATES DESCRIBED BY THE CALIFORNIA AIR RESOURCES BOARD EXECUTIVE ORDER BY WHICH THE SYSTEM WAS CERTIFIED:

NITROGEN FLOW RATES (CFH)	DYNAMIC BACK PRESSURE (INCHES OF WATER)
20	0.15
60	0.45
100	0.95

A DYNAMIC BACK PRESSURE TEST SHALL BE CONDUCTED, AS PER RULE 461 REQUIREMENTS, TO DETERMINE THE PHASE II SYSTEMS VAPOR RECOVERY BACK PRESSURE RATES. A COPY OF THE RESULTS FROM THE DYNAMIC BACK PRESSURE TESTS SHALL BE SUBMITTED TO THE SCAQMD WITHIN THIRTY (30) DAYS AFTER TESTING IS CONDUCTED.  
[RULE 461]

**Periodic Monitoring:**

9. THE OPERATOR SHALL HAVE A PERSON THAT HAS BEEN TRAINED IN ACCORDANCE WITH RULE 461(d)(5) CONDUCT AN ANNUAL INSPECTION IN ACCORDANCE WITH 461(d)(1)(B) OF THE GASOLINE TRANSFER AND DISPENSING EQUIPMENT. THE INSPECTION SHALL BE IN ACCORDANCE WITH RULE 461, ATTACHMENT C. THE OPERATOR SHALL KEEP RECORDS OF THE INSPECTION AND THE REPAIRS IN ACCORDANCE TO RULE 461 AND SECTION K OF THIS PERMIT.  
[RULE 3004 (a) (4)]



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**PERMIT TO OPERATE**

**Permit No. D82565  
A/N 291635**

**Equipment Description:**

INTERNAL COMBUSTION ENGINE, CATERPILLAR, MODEL NO. 3412 DITA, SERIAL NO. 38510601, DIESEL FUELED, EMERGENCY, ELECTRICAL GENERATOR DRIVER, TURBOCHARGED, AFTERCOOLED, 12 CYLINDERS, 550 BHP.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS ENGINE SHALL NOT BE USED IN CONJUNCTION WITH ANY UTILITY VOLUNTARY DEMAND REDUCTION PROGRAM.  
[RULE 204]
4. A TIMER SHALL BE MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.  
[RULE 1110.2; RULE 1304(a)(4)-MODELING AND OFFSET EXEMPTIONS]
5. THE OPERATING TIME OF THIS ENGINE SHALL NOT EXCEED 175 HOURS IN ANY ONE YEAR WHICH INCLUDES NO MORE THAN 30 HOURS FOR MAINTENANCE AND PERFORMANCE TESTING.  
[RULE 1110.2; RULE 1304(a)(4)-MODELING AND OFFSET EXEMPTIONS, RULE 1470]
6. OPERATION BEYOND THE 30 HOURS PER YEAR ALLOTTED FOR ENGINE MAINTENANCE AND TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE UTILITY DISTRIBUTION COMPANY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE. ENGINE OPERATION SHALL BE TERMINATED IMMEDIATELY AFTER THE UTILITY DISTRIBUTION COMPANY ADVISES THAT A ROTATING OUTAGE IS NO LONGER IMMINENT OR IN EFFECT.  
[RULE 1470]



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7. AN ENGINE OPERATING LOG LISTING THE DATE OF OPERATION, THE ELAPSED TIME, IN HOURS, AND THE REASON FOR OPERATION SHALL BE KEPT AND MAINTAINED ON FILE FOR A MINIMUM OF TWO YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.  
[RULE 204; RULE 1304(a)(4)-MODELING AND OFFSET EXEMPTIONS]
8. THE FUEL INJECTION TIMING OF THIS ENGINE SHALL BE SET AND MAINTAINED AT 4 DEGREES RETARDED RELATIVE TO STANDARD TIMING.  
[RULE 1303(a)(1)-BACT]

**Emissions And Requirements:**

9. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS



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**PERMIT TO OPERATE**

**Permit No. R-D84837  
A/N 294939**

**Equipment Description:**

INTERNAL COMBUSTION ENGINE, CATERPILLAR, MODEL NO. 3406 DITA, SERIAL NO. 90U14140, DIESEL FUELED, EMERGENCY ELECTRICAL GENERATOR DRIVER, TURBOCHARGED, AFTERCOOLED, 6 CYLINDERS, 305 BHP.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS ENGINE SHALL NOT BE USED IN CONJUNCTION WITH ANY UTILITY VOLUNTARY DEMAND REDUCTION PROGRAM.  
[RULE 204]
4. A TIMER SHALL BE MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.  
[RULE 1110.2; RULE 1304(a)(4)-MODELING AND OFFSET EXEMPTIONS]
5. THE OPERATING TIME OF THIS ENGINE SHALL NOT EXCEED 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NO MORE THAN 30 HOURS FOR MAINTENANCE AND PERFORMANCE TESTING.  
[RULE 1110.2; RULE 1304(a)(4)-MODELING AND OFFSET EXEMPTIONS, RULE 1470]
6. OPERATION BEYOND THE 30 HOURS PER YEAR ALLOTTED FOR ENGINE MAINTENANCE AND TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE UTILITY DISTRIBUTION COMPANY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE. ENGINE OPERATION SHALL BE TERMINATED IMMEDIATELY AFTER THE UTILITY DISTRIBUTION COMPANY ADVISES THAT A ROTATING OUTAGE IS NO LONGER IMMINENT OR IN EFFECT.  
[RULE 1470]
7. AN ENGINE OPERATING LOG LISTING THE DATE OF OPERATION, THE ELAPSED TIME, IN HOURS, AND THE REASON FOR OPERATION SHALL BE KEPT AND MAINTAINED ON FILE FOR A MINIMUM OF TWO YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.  
[RULE 204; RULE 1304(a)(4)-MODELING AND OFFSET EXEMPTIONS]



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**Emissions And Requirements:**

8. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### PERMIT TO OPERATE

Permit No. D91681  
A/N 299896

#### Equipment Description:

LANDFILL GAS FLARING SYSTEM NO. 2 CONSISTING OF:

1. TWO FLARES, NOS. I-1 AND I-4, EACH PROCESSING INTERIOR LANDFILL GAS, 10'-6" DIA. X 36'-0" H., WITH A VENTURI-TYPE BURNER, CONSTANT LANDFILL GAS PILOT BURNER, NATURAL GAS PILOT BURNER, ELECTRIC IGNITER, UV FLAME SCANNER, THERMOCOUPLE WITH TEMPERATURE INDICATOR AND RECORDER, AND AN AUTOMATIC COMBUSTION AIR REGULATING SYSTEM.
2. FLARE NO. I-5, PROCESSING PERIMETER LANDFILL GAS, 10'-6" DIA. X 36'-0" H., WITH A VENTURI-TYPE BURNER, CONSTANT LANDFILL GAS PILOT BURNER, NATURAL GAS PILOT BURNER, ELECTRIC IGNITER, UV FLAME SCANNER, THERMOCOUPLE WITH TEMPERATURE INDICATOR AND RECORDER, AND AN AUTOMATIC COMBUSTION AIR REGULATING SYSTEM.
3. STANDBY FLARE NO. I-6, PROCESSING INTERIOR OR PERIMETER LANDFILL GAS, 10'-6" DIA. X 36'-0" H., WITH A VENTURI-TYPE BURNER, CONSTANT LANDFILL GAS PILOT BURNER, NATURAL GAS PILOT BURNER, ELECTRIC IGNITER, UV FLAME SCANNER, THERMOCOUPLE WITH TEMPERATURE INDICATOR AND RECORDER, AND AN AUTOMATIC COMBUSTION AIR REGULATING SYSTEM.
4. FOUR (4) FLAME ARRESTORS, NOS. FA-1, FA-4, FA-5, AND FA-6, ONE FOR EACH FLARE.
5. FIVE (5) LANDFILL GAS FLOW ELEMENTS WITH RECORDERS, ONE FOR EACH FLARE AND ONE FOR THE GAS HEADER TO THE GAS TURBINE.
6. FOUR (4) AUTOMATIC LANDFILL GAS SHUT-OFF VALVES, NOS. FV-101, FV-104, FV-105, AND FV-106, ONE FOR EACH FLARE.
7. AUTOMATIC LANDFILL GAS PRESSURE CONTROL VALVE, PCV-113, WITH PRESSURE INDICATING CONTROLLER.
8. FIVE (5) AUTOMATIC BLOWER DISCHARGE SHUT-OFF VALVES, ONE FOR EACH BLOWER.
9. THREE (3) INTERIOR LANDFILL GAS BLOWERS, NOS. C-1, C-2, AND C-3, EACH HAUCK, MODEL NO. TBG 139-101-321 JX, 125 H.P., WITH AN AUTOMATIC DISCHARGE SHUT OFF VALVE.
10. TWO (2) PERIMETER LANDFILL GAS BLOWERS, NOS. C-5, AND C-6, EACH HAUCK, MODEL NO. TBG 139-101-321 JX, 100 HP, WITH AN AUTOMATIC DISCHARGE SHUT OFF VALVE.
11. INTERIOR LANDFILL GAS SEPARATOR, V-1.
12. PERIMETER LANDFILL GAS SEPARATOR, V-2.



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13. STEAM BOILER SUPPLY GAS SEPARATOR, V-3.
14. THREE (3) 8" PIPES VENTING OFF-GAS FROM THE LEACHATE TREATMENT PLANT TO FLARE NOS. I-4, I-5, AND I-6.

### Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED AND MAINTAINED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.  
[RULE 204]
4. EACH FLARE SHALL BE EQUIPPED WITH A TEMPERATURE INDICATOR AND RECORDER WHICH MEASURES AND RECORDS THE GAS TEMPERATURE IN THE FLARE STACK. THE TEMPERATURE INDICATOR AND RECORDER SHALL OPERATE WHENEVER THE FLARE IS IN OPERATION.  
[RULE 402; RULE 1303 (a)(1) – BACT; RULE 1401]
5. WHENEVER THE FLARE IS IN OPERATION, A TEMPERATURE OF NOT LESS THAN 1500 DEGREES FAHRENHEIT, AS MEASURED BY THE TEMPERATURE INDICATOR, SHALL BE MAINTAINED IN THE FLARE STACK.  
[RULE 402; RULE 1303 (a)(1) – BACT; RULE 1401]
6. THE OPERATOR SHALL OPERATE AND MAINTAIN THIS EQUIPMENT ACCORDING TO THE FOLLOWING REQUIREMENTS:

CONTINUOUS EXHAUST TEMPERATURE MONITORING AND RECORDING SYSTEM SHALL BE PURSUANT TO THE OPERATION AND MAINTENANCE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.7. SUCH A SYSTEM SHALL HAVE AN ACCURACY OF WITHIN  $\pm 1\%$  OF THE TEMPERATURE BEING MONITORED AND SHALL BE INSPECTED, MAINTAINED, AND CALIBRATED ON AN ANNUAL BASIS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS USING AN APPLICABLE AQMD OR EPA APPROVED METHOD.

FOR THE PURPOSE OF THIS CONDITION, A DEVIATION SHALL BE DEFINED AS WHEN A TEMPERATURE OF LESS THAN 1,500 DEGREES FAHRENHEIT OCCURS DURING NORMAL OPERATION EXCEPT DURING STARTUPS OR SHUTDOWNS. NOT TO EXCEED 30 MINUTES. THE EXHAUST TEMPERATURE SHALL BE AVERAGED OVER A 15-MINUTE PERIOD, AND HOURLY AVERAGE SHALL BE COMPUTED FROM SUCH DATA POINTS. THE OPERATOR SHALL REVIEW THE RECORDS OF TEMPERATURE ON A DAILY BASIS TO DETERMINE IF A DEVIATION OCCURS OR SHALL INSTALL AN ALARM SYSTEM TO ALERT THE OPERATOR WHEN A DEVIATION OCCURS.



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FOR EACH SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K, WHENEVER A DEVIATION OCCURS FROM 1,500 DEGREES FAHRENHEIT, THE OPERATOR SHALL TAKE IMMEDIATE CORRECTIVE ACTION, AND KEEP RECORDS OF THE DURATION AND CAUSE (INCLUDING UNKNOWN CAUSE, IF APPLICABLE) OF THE DEVIATION AND THE CORRECTIVE ACTION TAKEN.

ALL DEVIATIONS SHALL BE REPORTED TO THE AQMD ON A SEMI-ANNUAL BASIS PURSUANT TO THE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.9 AND CONDITION NOS. 22 AND 23 IN SECTION K OF THIS PERMIT.

THE OPERATOR SHALL SUBMIT AN APPLICATION WITH A QUALITY IMPROVEMENT PLAN (QIP) IN ACCORDANCE WITH 40 CFR PART 64.8 TO THE AQMD IF AN ACCUMULATION OF DEVIATIONS EXCEEDS 5 PERCENT DURATION OF THIS EQUIPMENT'S TOTAL OPERATING TIME FOR ANY SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K OF THIS PERMIT. THE REQUIRED QIP SHALL BE SUBMITTED TO THE AQMD WITHIN 90 CALENDAR DAYS AFTER THE DUE DATE FOR THE SEMI-ANNUAL MONITORING REPORT.

THE OPERATOR SHALL INSPECT AND MAINTAIN ALL COMPONENTS OF THIS EQUIPMENT ON AN ANNUAL BASIS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE OPERATOR SHALL KEEP ADEQUATE RECORDS IN A FORMAT THAT IS ACCEPTABLE TO THE AQMD TO DEMONSTRATE COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS SPECIFIED IN THIS CONDITION AND 40 CFR PART 64.9 FOR A MINIMUM OF FIVE YEARS. [RULE 3004(A) (4)-PERIODIC MONITORING, 40CFR PART 64]

- 7. THE FLOW INDICATORS AND RECORDERS INSTALLED IN THE LANDFILL GAS SUPPLY LINE TO THE FLARES AND TO THE GAS TURBINE SHALL OPERATE CONTINUOUSLY. [RULE 204; RULE 1303 (b)(2) - OFFSET]
- 8. THE TOTAL HEAT RELEASE RATE OF THE LANDFILL GAS COMBUSTED AT FLARE STATION NO. 2 SHALL NOT EXCEED 97.2 MMBTU PER HOUR OF INTERIOR GAS AND 54.7 MMBTU PER HOUR OF PERIMETER GAS. THE INTERIOR AND PERIMETER LANDFILL GAS FLOW RATE TO THE FLARES SHALL BE CALCULATED USING THE FOLLOWING FORMULAS. THE LANDFILL GAS (INTERIOR AND PERIMETER) FLOW INDICATING OR RECORDING VALUE (SCFM), PER CONDITION NO. 6, SHALL NOT EXCEED THE CORRESPONDING CALCULATED LANDFILL GAS FLOW RATE.

TOTAL INTERIOR LANDFILL GAS FLOW RATE TO FLARES:

$$Q \text{ (SCFM)} = \frac{97.2 \times 10^6 \text{ BTU/HR}}{(\% \text{ METHANE CONC./ } 100) (1,012 \text{ BTU/SCF}) (60 \text{ MIN/HR})}$$

TOTAL PERIMETER LANDFILL GAS FLOW RATE TO FLARES:

$$Q \text{ (SCFM)} = \frac{54.7 \times 10^6 \text{ BTU/HR}}{(\% \text{ METHANE CONC./ } 100) (1,012 \text{ BTU/SCF}) (60 \text{ MIN/HR})}$$



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%METHANE CONCENTRATION OF THE INTERIOR AND PERIMETER LANDFILL GAS FED TO THE FLARE(S) SHALL BE MEASURED ONCE PER OPERATING DAY, EXCLUDING WEEKENDS AND HOLIDAYS.

[RULE 402; RULE 1303 (a)(1) – BACT; RULE 1303 (b)(2) – OFFSET]

9. THE TOTAL HEAT RELEASE RATE OF THE LANDFILL GAS COMBUSTED AT THE FLARE STATION SHALL BE SUCH THAT THE COMBINED LANDFILL GAS BEING COMBUSTED AT FLARE STATION NO. 1, THE PERIMETER GAS COMBUSTED AT FLARE STATION NO. 2, AND THE BOILER SHALL NOT EXCEED 288.40 MMBTU PER HOUR. THE TOTAL COMBINED LANDFILL GAS FLOW RATE TO THE FLARE STATION NO.1, PERIMETER GAS AT FLARE STATION NO. 2, AND THE BOILER SHALL BE CALCULATED USING THE FOLLOWING FORMULA. THE MEASURED LANDFILL GAS FLOW RATE VALUE (SCFM), WHEN COMBINED FOR EACH OF THE ABOVE FLARE STATIONS AND BOILER, SHALL NOT EXCEED THE CALCULATED TOTAL LANDFILL GAS FLOW RATE.

$$Q \text{ (SCFM)} = \frac{288.40 \times 10^6 \text{ BTU/HR}}{(\% \text{METHANE CONC}/100) (1,012 \text{ BTU/SCF}) (60 \text{ MIN/HR})}$$

%METHANE CONCENTRATION OF THE LANDFILL GAS FED TO THE FLARE(S) AND BOILER SHALL BE MEASURED ONCE PER OPERATING DAY, EXCLUDING WEEKENDS AND HOLIDAYS.

[RULE 402; RULE 1303 (a)(1) – BACT; RULE 1303 (b)(2) – OFFSET]

10. THE TOTAL HEAT RELEASE RATE OF THE LANDFILL GAS COMBUSTED IN THE INTERIOR GAS FLARES AND THE GAS TURBINE SHALL NOT EXCEED 133.6 MMBTU PER HOUR. THE INTERIOR LANDFILL GAS FLOW RATE TO THE FLARES AND THE GAS TURBINE SHALL BE CALCULATED USING THE FOLLOWING FORMULA. THE TOTAL INTERIOR LANDFILL GAS FLOW INDICATING OR RECORDING VALUE (SCFM), PER CONDITION NO. 6, SHALL NOT EXCEED THE CORRESPONDING CALCULATED LANDFILL GAS FLOW RATE.

TOTAL INTERIOR LANDFILL GAS FLOW RATE TO FLARES AND GAS TURBINE:

$$Q \text{ (SCFM)} = \frac{133.6 \times 10^6 \text{ BTU/HR}}{(\% \text{METHANE CONC}/100) (1,012 \text{ BTU/SCF}) (60 \text{ MIN/HR})}$$

%METHANE CONCENTRATION OF THE INTERIOR LANDFILL GAS FED TO THE FLARE(S) SHALL BE MEASURED ONCE PER OPERATING DAY, EXCLUDING WEEKENDS AND HOLIDAYS.

[RULE 402; RULE 1303 (a)(1) – BACT; RULE 1303 (b)(2) – OFFSET]

11. THE TOTAL HEAT RELEASE RATE OF THE INTERIOR LANDFILL COMBUSTED INDIVIDUALLY IN FLARE I-1, I-4, OR I-6 SHALL NOT EXCEED 48.6 MMBTU PER HOUR. THE INTERIOR LANDFILL GAS FLOW RATE TO EACH ABOVE FLARE SHALL BE CALCULATED USING THE FOLLOWING FORMULA. THE TOTAL INTERIOR LANDFILL GAS FLOW INDICATING OR RECORDING VALUE (SCFM), PER CONDITION NO. 6, SHALL NOT EXCEED THE CORRESPONDING CALCULATED LANDFILL GAS FLOW RATE.



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TOTAL INTERIOR LANDFILL GAS FLOW RATE TO INDIVIDUAL FLARE I-1, I-4 OR I-6:

$$Q \text{ (SCFM)} = \frac{48.6 \times 10^6 \text{ BTU/HR}}{(\% \text{METHANE CONC}/100)(1,012 \text{ BTU/SCF})(60 \text{ MIN/HR})}$$

% METHANE CONCENTRATION OF THE INTERIOR LANDFILL GAS FED TO THE FLARE(S) SHALL BE MEASURED ONCE PER OPERATING DAY, EXCLUDING WEEKENDS AND HOLIDAYS.  
[RULE 402; RULE 1303 (a)(1) – BACT; RULE 1303 (b)(2) – OFFSET]

12. THE TOTAL HEAT RELEASE RATE OF THE PERIMETER LANDFILL GAS COMBUSTED INDIVIDUALLY IN FLARE I-5 AND I-6 SHALL NOT EXCEED 54.7 MMBTU PER HOUR. THE TOTAL PERIMETER LANDFILL GAS FLOW RATE TO ABOVE FLARES SHALL BE CALCULATED USING THE FOLLOWING FORMULA. THE TOTAL PERIMETER LANDFILL GAS FLOW INDICATING OR RECORDING VALUE (SCFM), PER CONDITION NO. 6, SHALL NOT EXCEED THE CORRESPONDING CALCULATED LANDFILL GAS FLOW RATE.

TOTAL PERIMETER LANDFILL GAS FLOW RATE TO FLARE I-1 AND I-6:

$$Q \text{ (SCFM)} = \frac{54.7 \times 10^6 \text{ BTU/HR}}{(\% \text{METHANE CONC.}/100) (1,012 \text{ BTU/SCF}) (60 \text{ MIN/HR})}$$

%METHANE CONCENTRATION OF THE PERIMETER LANDFILL GAS FED TO THE FLARE(S) SHALL BE MEASURED ONCE PER OPERATING DAY, EXCLUDING WEEKENDS AND HOLIDAYS.  
[RULE 402; RULE 1303 (a)(1) – BACT; RULE 1303 (b)(2) – OFFSET]

13. THE TOTAL HEAT RELEASE RATE OF THE INTERIOR LANDFILL GAS COMBUSTED IN EACH FLARE I-1, I-4, OR I-6 IS ALLOWED TO INCREASE UP TO A MAXIMUM OF 97.2 MMBTU PER HOUR DURING THE FIRST FOUR HOURS FOLLOWING A GAS TURBINE TRIP OR A BOILER TRIP.  
[RULE 402; RULE 1303 (a)(1) – BACT; RULE 1303 (b)(2) – OFFSET]
14. THE RATE OF CRITERIA POLLUTANT EMISSIONS FROM THE EXHAUST OF EACH INDIVIDUAL FLARE, AT FLARE STATION NO.2, (INTERIOR GAS COMBUSTION, FLARE I-1, I-4, OR I-6) SHALL NOT EXCEED THE FOLLOWING:

POLLUTANT	LB/HR	LB/DAY
NOx AS NO2	2.92	70.10
SOx AS SO2	2.92	70.10
CO	3.40	81.60
PM10	2.67	64.10
ROG	4.86	116.64

[RULE 1303 (b)(1) – MODELING; RULE 1303 (b)(2) – OFFSET]



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15. THE RATE OF CRITERIA POLLUTANT EMISSIONS FROM THE EXHAUST OF FLARE STATION NO. 2, (PERIMETER GAS COMBUSTION, FLARE I-5 AND I-6) SHALL NOT EXCEED THE FOLLOWING:

POLLUTANT	LB/HR	LB/DAY
NO <sub>x</sub> AS NO <sub>2</sub>	3.28	78.72
SO <sub>x</sub> AS SO <sub>2</sub>	3.28	78.72
CO	3.83	91.92
PM <sub>10</sub>	3.01	72.24
ROG	5.47	131.28

[RULE 1303 (b)(1) – MODELING; RULE 1303 (b)(2) – OFFSET]

16. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO TIME OF THE DAY.  
[RULE 204; RULE 1303 (b)(2) – OFFSET]
17. THE FLARE FAILURE ALARM WITH AUTOMATIC BLOWER AND ASSOCIATED LANDFILL GAS SUPPLY VALVE SHUT-OFF SYSTEM APPROVED BY THE EXECUTIVE OFFICER SHALL BE MAINTAINED.  
[RULE 204; RULE 430; RULE 1303 (a) (1) – BACT]
18. THE APPROVED AUTOMATIC SYSTEM TO SHUT OFF THE LEACHATE TREATMENT PLANT OFF-GAS UPON FLARE FAILURE SHALL BE OPERATIONAL AT ALL TIMES.  
[RULE 204; RULE 430; RULE 1303 (a) (1) – BACT]
19. THE LEACHATE TREATMENT PLANT OFF-GAS SHALL BE VENTED TO THE FLARE WHICH IS IN FULL OPERATION AND HAS A VALID PERMIT FROM THE SCAQMD.  
[RULE 1303 (a) (1) – BACT]
20. THE PRESSURE DIFFERENTIAL INDICATORS SHALL BE MAINTAINED ACROSS EACH FLAME ARRESTOR.  
[RULE 1303 (a)(1) – BACT]
21. SAMPLING PORTS SHALL BE MAINTAINED ON EACH FLARE STACK. ADEQUATE AND SAFE ACCESS TO ALL SOURCE TEST PORTS SHALL BE PROVIDED BY THE APPLICANT WITHIN TWENTY-FOUR (24) HOURS UPON REQUEST BY THE SCAQMD TO CONDUCT A TEST.  
[RULE 217]
22. THE SKIN TEMPERATURE OF THE FLARE SHROUD WITHIN FOUR FEET OF ALL THE SOURCE TEST PORTS SHALL NOT EXCEED 250 DEGREES F. IF A HEAT SHIELD IS REQUIRED TO MEET THIS REQUIREMENT, ITS DESIGN SHALL BE APPROVED BY THE EXECUTIVE OFFICER PRIOR TO CONSTRUCTION. THE HEAT SHIELD, IF REQUIRED TO MEET THE TEMPERATURE REQUIREMENT, SHALL BE IN PLACE WHENEVER A TEST IS CONDUCTED BY THE SCAQMD.  
[RULE 217]
23. ANY BREAKDOWN OR MALFUNCTION OF LANDFILL GAS FLARE STATION NO. 2 EQUIPMENT RESULTING IN THE EMISSION OF RAW LANDFILL GAS SHALL BE REPORTED TO THE SCAQMD WITHIN ONE HOUR OF DETECTION, AND IMMEDIATE REMEDIAL MEASURES SHALL BE UNDERTAKEN TO CORRECT THE PROBLEM AND PREVENT FURTHER EMISSIONS INTO THE ATMOSPHERE.  
[RULE 402; RULE 430; RULE 1150.1]



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24. ALL RECORDS SHALL BE KEPT FOR A PERIOD OF AT LEAST FIVE (5) YEARS IN A FORM APPROVED BY THE SCAQMD AND SHALL BE MADE AVAILABLE TO THE SCAQMD PERSONNEL UPON REQUEST.  
[RULE 204]

### Emissions And Requirements:

25. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
- NMOC: 98% DESTRUCTION EFFICIENCY OR 20 PPMV, AS HEXANE @3% O<sub>2</sub> - RULE 1150.1,  
NMOC: 98% DESTRUCTION EFFICIENCY OR 20 PPMV, AS HEXANE @3% O<sub>2</sub>-40CFR63 SUBPART  
AAAA (CLASS III)  
CO: 2000 PPMV, RULE 407  
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS  
PM: 0.1 gr/scf, RULE 409

### Periodic Monitoring:

26. THE OWNER OR OPERATOR SHALL CONDUCT PERFORMANCE TESTS OF THE FLARES IN ACCORDANCE WITH AQMD TEST PROCEDURES. WRITTEN NOTICE OF SUCH TESTS SHALL BE PROVIDED TO THE AQMD TOXICS AND WASTE MANAGEMENT TEAM AT LEAST 10 DAYS PRIOR TO THE TEST DATE SO THAT AN OBSERVER MAY BE PRESENT. WRITTEN RESULTS OF SUCH TESTS SHALL BE DELIVERED TO THE AQMD WITHIN 60 DAYS AFTER TESTING. THE PERFORMANCE TESTS SHALL BE CONDUCTED AT THE FLARE EXHAUSTS AT LEAST ONCE EVERY FIVE YEARS TO DETERMINE THE EMISSIONS OF NO<sub>x</sub>, CO, AND PM, IN LBS/HR.



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**PERMIT TO OPERATE**

**Permit No. F7264  
A/N 299897**

**Equipment Description:**

LANDFILL GAS FLARING SYSTEM NO. 1, CONSISTING OF:

1. SIX (6) FLARES, (NOS. FLR-101 THROUGH FLR-106), EACH 9' DIA. X 22' H., WITH A VENTURI-TYPE BURNER, PROPANE GAS PILOT, ELECTRIC IGNITER, UV FLAME SENSOR, AUTOMATIC SHUTDOWN AND ALARM SYSTEM, AUTOMATIC COMBUSTION AIR REGULATING SYSTEM AND TEMPERATURE CONTROLLER.
2. SIX (6) FLAME ARRESTORS (FA-101 THROUGH FA-106), GROTH 12 IN. HORIZONTAL TYPE, MODEL NO. 7628-12-11-F00, OR EQUIVALENT.
3. TWO (2) FUEL FILTER/KNOCKOUT DRUMS, PEERLESS DRY SCRUBBERS, NO. V-701, MODEL 21-160 OR EQUIVALENT, AND NO. V-702, MODEL 21-148 OR EQUIVALENT.
4. FOUR (4) BLOWERS (NOS. C-701-1, 2, 3, AND 4), EACH HAUCK MFG. CO; MODEL NO. TBA-36- 100T, EACH 100 HP.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED AND MAINTAINED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.  
[RULE 204]
4. EACH FLARE SHALL BE EQUIPPED WITH A TEMPERATURE INDICATOR AND RECORDER WHICH MEASURES AND RECORDS THE GAS TEMPERATURE IN THE FLARE STACK. THE TEMPERATURE INDICATOR AND RECORDER SHALL OPERATE WHENEVER THE FLARE IS IN OPERATION.  
[RULE 402; RULE 1303 (a) (1) - BACT]
5. WHENEVER THE FLARE IS IN OPERATION, A TEMPERATURE OF NOT LESS THAN 1500 DEGREES FAHRENHEIT, AS MEASURED BY THE TEMPERATURE INDICATOR, SHALL BE MAINTAINED IN THE FLARE STACK.  
[RULE 402; RULE 1303 (a)(1) - BACT]



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6. THE OPERATOR SHALL OPERATE AND MAINTAIN THIS EQUIPMENT ACCORDING TO THE FOLLOWING REQUIREMENTS:

CONTINUOUS EXHAUST TEMPERATURE MONITORING AND RECORDING SYSTEM SHALL BE PURSUANT TO THE OPERATION AND MAINTENANCE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.7. SUCH A SYSTEM SHALL HAVE AN ACCURACY OF WITHIN  $\pm 1\%$  OF THE TEMPERATURE BEING MONITORED AND SHALL BE INSPECTED, MAINTAINED, AND CALIBRATED ON AN ANNUAL BASIS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS USING AN APPLICABLE AQMD OR EPA APPROVED METHOD.

FOR THE PURPOSE OF THIS CONDITION, A DEVIATION SHALL BE DEFINED AS WHEN A TEMPERATURE OF LESS THAN 1,500 DEGREES FAHRENHEIT OCCURS DURING NORMAL OPERATION EXCEPT DURING STARTUPS OR SHUTDOWNS. NOT TO EXCEED 30 MINUTES. THE EXHAUST TEMPERATURE SHALL BE AVERAGED OVER A 15-MINUTE PERIOD, AND HOURLY AVERAGE SHALL BE COMPUTED FROM SUCH DATA POINTS. THE OPERATOR SHALL REVIEW THE RECORDS OF TEMPERATURE ON A DAILY BASIS TO DETERMINE IF A DEVIATION OCCURS OR SHALL INSTALL AN ALARM SYSTEM TO ALERT THE OPERATOR WHEN A DEVIATION OCCURS.

FOR EACH SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K, WHENEVER A DEVIATION OCCURS FROM 1,500 DEGREES FAHRENHEIT, THE OPERATOR SHALL TAKE IMMEDIATE CORRECTIVE ACTION, AND KEEP RECORDS OF THE DURATION AND CAUSE (INCLUDING UNKNOWN CAUSE, IF APPLICABLE) OF THE DEVIATION AND THE CORRECTIVE ACTION TAKEN.

ALL DEVIATIONS SHALL BE REPORTED TO THE AQMD ON A SEMI-ANNUAL BASIS PURSUANT TO THE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.9 AND CONDITION NOS. 22 AND 23 IN SECTION K OF THIS PERMIT.

THE OPERATOR SHALL SUBMIT AN APPLICATION WITH A QUALITY IMPROVEMENT PLAN (QIP) IN ACCORDANCE WITH 40 CFR PART 64.8 TO THE AQMD IF AN ACCUMULATION OF DEVIATIONS EXCEEDS 5 PERCENT DURATION OF THIS EQUIPMENT'S TOTAL OPERATING TIME FOR ANY SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K OF THIS PERMIT. THE REQUIRED QIP SHALL BE SUBMITTED TO THE AQMD WITHIN 90 CALENDAR DAYS AFTER THE DUE DATE FOR THE SEMI-ANNUAL MONITORING REPORT.

THE OPERATOR SHALL INSPECT AND MAINTAIN ALL COMPONENTS OF THIS EQUIPMENT ON AN ANNUAL BASIS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE OPERATOR SHALL KEEP ADEQUATE RECORDS IN A FORMAT THAT IS ACCEPTABLE TO THE AQMD TO DEMONSTRATE COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS SPECIFIED IN THIS CONDITION AND 40 CFR PART 64.9 FOR A MINIMUM OF FIVE YEARS.  
[RULE 3004(A) (4)-PERIODIC MONITORING, 40CFR PART 64]



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7. EACH FLARE SHALL BE EQUIPPED WITH A FLOW INDICATING AND RECORDING DEVICE WHICH MEASURES AND RECORDS THE FLOW OF LANDFILL GAS TO EACH FLARE. THE FLOW INDICATORS AND RECORDERS SHALL OPERATE CONTINUOUSLY.  
[RULE 1150.1; RULE 1303 (b)(2) – OFFSET]

8. THE TOTAL HEAT RELEASE RATE OF THE LANDFILL GAS COMBUSTED IN THE SIX FLARES SHALL NOT EXCEED 233.75 MMBTU PER HOUR. THE TOTAL HEAT RELEASE RATE OF LANDFILL GAS COMBUSTED IN EACH FLARE SHALL NOT EXCEED 42.5 MMBTU PER HOUR. THE TOTAL LANDFILL GAS FLOW RATE TO THE SIX (6) FLARES, AND THE LANDFILL GAS FLOW RATE TO EACH FLARE SHALL BE CALCULATED USING THE FOLLOWING FORMULAS. THE LANDFILL GAS FLOW INDICATING OR RECORDING VALUE (SCFM), PER CONDITION NO. 6, SHALL NOT EXCEED THE CORRESPONDING CALCULATED LANDFILL GAS FLOW RATE. TOTAL LANDFILL GAS FLOW RATE TO SIX (6) FLARES:

$$Q \text{ (SCFM)} = \frac{233.75 \times 10^6 \text{ BTU/HR}}{(\% \text{ METHANE CONC./ } 100) (1,012 \text{ BTU/SCF}) (60 \text{ MIN/HR})}$$

LANDFILL GAS FLOW RATE TO EACH FLARE:

$$Q \text{ (SCFM)} = \frac{42.5 \times 10^6 \text{ BTU/HR}}{(\% \text{ METHANE CONC./ } 100) (1,012 \text{ BTU/SCF}) (60 \text{ MIN/HR})}$$

%METHANE CONCENTRATION OF THE LANDFILL GAS FED TO THE FLARE(S) SHALL BE MEASURED ONCE PER OPERATING DAY, EXCLUDING WEEKENDS AND HOLIDAYS.  
[RULE 402; RULE 1303 (a)(1) – BACT; RULE 1303 (b)(2) – OFFSET]

9. THE TOTAL HEAT RELEASE RATE OF THE LANDFILL GAS COMBUSTED AT THE FLARE STATION SHALL BE SUCH THAT THE COMBINED LANDFILL GAS BEING COMBUSTED AT FLARE STATION NO. 1, THE PERIMETER GAS COMBUSTED AT FLARE STATION NO. 2, AND THE BOILER SHALL NOT EXCEED 288.40 MMBTU PER HOUR. THE TOTAL COMBINED LANDFILL GAS FLOW RATE TO THE FLARE STATION NO. 1, PERIMETER GAS AT FLARE STATION NO. 2, AND THE BOILER SHALL BE CALCULATED USING THE FOLLOWING FORMULA. THE MEASURED LANDFILL GAS FLOW RATE VALUE (SCFM), WHEN COMBINED FOR EACH OF THE ABOVE FLARE STATIONS AND BOILER, SHALL NOT EXCEED THE CALCULATED TOTAL LANDFILL GAS FLOW RATE.

$$Q \text{ (SCFM)} = \frac{288.40 \times 10^6 \text{ BTU/HR}}{(\% \text{ METHANE CONC./ } 100) (1,012 \text{ BTU/SCF}) (60 \text{ MIN/HR})}$$

%METHANE CONCENTRATION OF THE LANDFILL GAS FED TO THE FLARE(S) AND BOILER SHALL BE MEASURED ONCE PER OPERATING DAY, EXCLUDING WEEKENDS AND HOLIDAYS.  
[RULE 402; RULE 1303 (a)(1) – BACT; RULE 1303 (b)(2) – OFFSET]

10. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO TIME OF DAY.  
[RULE 204; RULE 1303 (b)(2) – OFFSET]



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11. THE FLARE FAILURE ALARM WITH AUTOMATIC BLOWER AND ASSOCIATED LANDFILL GAS SUPPLY VALVE SHUT-OFF SYSTEM APPROVED BY THE EXECUTIVE OFFICER SHALL BE MAINTAINED IN GOOD WORKING CONDITION.  
[RULE 204; RULE 430; RULE 1401]

12. SAMPLING PORTS SHALL BE MAINTAINED ON EACH FLARE STACK. ADEQUATE AND SAFE ACCESS TO ALL SOURCE TEST PORTS SHALL BE PROVIDED BY THE APPLICANT WITHIN TWENTY-FOUR (24) HOURS UPON REQUEST BY THE AQMD TO CONDUCT A TEST.  
[RULE 217]

13. THE SKIN TEMPERATURE OF THE FLARE SHROUD WITHIN FOUR FEET OF ALL SOURCE TEST PORTS SHALL NOT EXCEED 250 DEGREES F. IF A HEAT SHIELD IS REQUIRED TO MEET THIS REQUIREMENT, ITS DESIGN SHALL BE APPROVED BY THE EXECUTIVE OFFICER PRIOR TO CONSTRUCTION. THE HEAT SHIELD, IF REQUIRED TO MEET THE TEMPERATURE REQUIREMENT, SHALL BE IN PLACE WHENEVER A TEST IS CONDUCTED.  
[RULE 217]

14. ANY BREAKDOWN OR MALFUNCTION OF THIS EQUIPMENT RESULTING IN THE EMISSION OF RAW LANDFILL GAS SHALL BE REPORTED TO THE AQMD WITHIN ONE HOUR OF DETECTION, AND IMMEDIATE REMEDIAL MEASURES SHALL BE UNDERTAKEN TO CORRECT THE PROBLEM AND PREVENT FURTHER EMISSIONS INTO THE ATMOSPHERE.  
[RULE 402; RULE 430; RULE 1150.1]

15. THE: RATE OF CRITERIA POLLUTANT EMISSIONS FROM THE EXHAUST OF EACH INDIVIDUAL FLARE, AT FLARE STATION NO. 1, SHALL NOT EXCEED THE FOLLOWING:

POLLUTANT	LB/HR	LB/DAY
NO <sub>x</sub> AS NO <sub>2</sub>	3.12	74.9
SO <sub>x</sub> AS SO <sub>2</sub>	0.68	16.3
CO	0.55	13.2
PM <sub>10</sub>	0.96	23.0
ROG	0.17	4.1

[RULE 1303 (b)(1) – MODELING; RULE 1303 (b)(2) – OFFSET]

16. IF THE EMISSIONS OF TOXICS AND POTENTIALLY TOXIC SUBSTANCES EXCEED THE CORRESPONDING VALUES USED IN THE HEALTH RISK ASSESSMENT FOR THE PERMIT TO CONSTRUCT EVALUATION, OR ANY OF THE OPERATING AND OR STACK PARAMETERS USED IN THE HEALTH RISK ASSESSMENT ARE CHANGED WHICH WILL RESULT IN AN INCREASE IN GROUND LEVEL CONCENTRATIONS, THE APPLICANT SHALL SUBMIT A REVISED HEALTH RISK ASSESSMENT FOR AQMD APPROVAL WITHIN FORTY-FIVE (45) DAYS AFTER NOTICE IS GIVEN FOR SUCH PREPARATION, UNLESS OTHERWISE APPROVED IN WRITING BY THE AQMD.  
[RULE 204]

17. ALL RECORDS SHALL BE KEPT FOR A PERIOD OF AT LEAST FIVE (5) YEARS IN A FORM APPROVED BY THE AQMD AND SHALL BE MADE AVAILABLE TO THE AQMD PERSONNEL UPON REQUEST.  
[RULE 204]



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### Emissions And Requirements:

18. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

NMOC: 98% DESTRUCTION EFFICIENCY OR 20 PPMV, AS HEXANE @3% O<sub>2</sub> - RULE 1150.1,  
NMOC: 98% DESTRUCTION EFFICIENCY OR 20 PPMV, AS HEXANE @3% O<sub>2</sub>-40CFR63 SUBPART  
AAAA (CLASS III)  
CO: 2000 PPMv, RULE 407  
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS  
PM: 0.1 gr/scf, RULE 409

### Periodic Monitoring:

19. THE OWNER OR OPERATOR SHALL CONDUCT PERFORMANCE TESTS OF THE FLARES IN ACCORDANCE WITH AQMD TEST PROCEDURES. WRITTEN NOTICE OF SUCH TESTS SHALL BE PROVIDED TO THE AQMD TOXICS AND WASTE MANAGEMENT TEAM AT LEAST 10 DAYS PRIOR TO THE TEST DATE SO THAT AN OBSERVER MAY BE PRESENT. WRITTEN RESULTS OF SUCH TESTS SHALL BE DELIVERED TO THE AQMD WITHIN 60 DAYS AFTER TESTING. THE PERFORMANCE TESTS SHALL BE CONDUCTED AT THE FLARE EXHAUSTS ATLEAST ONCE EVERY FIVE YEARS TO DETERMINE THE EMISSIONS OF NO<sub>x</sub>, CO, AND PM, IN LBS/HR.



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

**PERMIT TO OPERATE**

**Permit No. D90787  
A/N 300383**

**Equipment Description:**

LANDFILL GAS COLLECTION SYSTEM (CLASS III) CONSISTING OF:

1. TWO HUNDRED SIXTY (260) TOTAL MAXIMUM, SHALLOW VERTICAL LANDFILL GAS COLLECTION WELLS AT A MAXIMUM DEPTH OF 60 FEET, CONSISTING OF ALTERNATING SOLID AND SLOTTED PVC OR STEEL PIPING.
2. NINETEEN (19) TOTAL MAXIMUM, DEEP VERTICAL LANDFILL GAS COLLECTION WELLS AT A MINIMUM DEPTH OF 120 FEET AND A MAXIMUM DEPTH OF 150 FEET, CONSISTING OF SOLID AND SLOTTED PVC PIPING (NOMINAL 6 INCH DIAMETER).
3. SIXTY-SIX (66) TOTAL MAXIMUM, DEEP VERTICAL LANDFILL GAS COLLECTION WELLS AT A MINIMUM DEPTH OF 60 FEET AND A MAXIMUM DEPTH OF TWO HUNDRED FEET, CONSISTING OF ALTERNATING SOLID AND SLOTTED PVC OR STEEL PIPING.
4. ONE HUNDRED SIXTY-TWO (162) TOTAL MAXIMUM, HORIZONTAL LANDFILL GAS COLLECTORS CONSISTING OF 4 FOOT DEEP X 2 FOOT WIDE TRENCH, AND 2" AND 4" TELESCOPING PVC PIPE OR 4" AND 6" PVC PIPE, OR 6" HDPE SLOTTED PIPE, OR 6" AND 8" ALTERNATING CORRUGATED METAL PIPE, AT THE FOLLOWING ELEVATIONS, LINEAR FEET OF PIPE AND NUMBER OF HORIZONTAL WELL HEADS:

ELEVATION, FT	LINEAR FEET OF PVC	NO. WELL HEADS
600	4900	5
640	5800	11
680	5500	18
720	9000	8
760	8000	5
800	10200	19
840	4800	28
880	5000	12
920(910)	7500	25
960(950)	10150	31
		162

5. SEVENTY-FIVE (75) TOTAL MAXIMUM, DEEP VERTICAL LANDFILL GAS COLLECTION WELLS AT A MAXIMUM DEPTH OF 200 FEET CONSISTING OF ALTERNATING SOLID AND SLOTTED PVC OR STEEL PIPING.
6. FORTY FIVE (45) HORIZONTAL LANDFILL GAS COLLECTORS, TOTALING 17,000 LINEAR FEET, CONSISTING OF 4 FOOT DEEP X 2 FOOT WIDE TRENCH, WITH PVC AND/OR HDPE PIPING, AT NOMINAL ELEVATIONS OF 850 AND 880 FEET. (THIS IS THE BOTTOM AND FIRST LIFT GAS GRID SYSTEM FOR THE NORTH AREA STEP-OUT).



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. EACH VERTICAL AND HORIZONTAL WELL HEAD SHALL BE EQUIPPED WITH A SHUT-OFF VALVE AND SAMPLING PORT.  
[RULE 1303 (a)(1) - BACT]
4. ALL LANDFILL GASES COLLECTED BY THIS SYSTEM SHALL BE VENTED TO THE FLARES, GAS TURBINE, OR BOILER WHICH ARE IN FULL USE, CAN ADEQUATELY PROCESS THE VOLUME OF GAS COLLECTED, AND HAS BEEN ISSUED A VALID PERMIT TO CONSTRUCT OR OPERATE BY THE AQMD, (N/A TO DIRECT VENTING SYSTEMS).  
[RULE 402; RULE 1150.1; RULE 1303 (a) (1)-BACT]
5. AFTER CONSTRUCTION OF A GROUP OF WELLS AND THEIR ASSOCIATED PIPING IS COMPLETE, THE PERMITTEE SHALL SUBMIT AS-BUILT DRAWINGS IN DUPLICATE TO THE AQMD.  
[RULE 204; RULE 1150.1]
6. ALL PIPING SHALL BE SEALED AT ALL OPENINGS TO PREVENT LANDFILL GAS FROM ESCAPING INTO THE ATMOSPHERE.  
[RULE 402; RULE 1150.1]
7. IF A DISTINCT ODOR LEVEL (LEVEL III OR GREATER) RESULTING FROM THE CONSTRUCTION IS DETECTED AT OR BEYOND THE PROPERTY LINE, ALL WORK SHALL CEASE UNTIL THE ODOR SOURCES ARE DETERMINED AND ELIMINATED. ODOR LEVELS SHALL BE DETERMINED BY SCAQMD PERSONNEL OR ON-SITE SAFETY COORDINATOR IN THE ABSENCE OF SCAQMD PERSONNEL.  
[RULE 402, RULE 1150]
8. THE CONSTRUCTION OF ANY PIPING OR WELL TRENCH WHICH EXPOSES LANDFILL TRASH TO THE ATMOSPHERE SHALL BE STAGED SUCH THAT NO MORE THAN ONE HUNDRED (100) LINEAR FEET OF TRENCH IS EXPOSED AT ANY TIME PRIOR TO BACKFILLING.  
[RULE 402, RULE 1150]
9. WELL HOLES, TRENCHES, AND EXPOSED LANDFILL TRASH SHALL BE COMPLETELY COVERED TO PREVENT ANY EMISSIONS OF LANDFILL GAS TO THE ATMOSPHERE WHENEVER WORK IS NOT ACTIVELY IN PROGRESS. THE COVER SHALL INCLUDE, BUT MAY NOT BE LIMITED TO A MINIMUM OF 6 INCHES OF CLEAN DIRT, APPROVED FOAM, OR HEAVY-DUTY PLASTIC SHEETING. FOAM BY ITSELF SHALL NOT BE USED AS A NIGHT COVER IF IT IS RAINING OR RAIN IS PREDICTED BY THE NATIONAL WEATHER SERVICE PRIOR TO THE NEXT SCHEDULED WORKING DAY.  
[RULE 402, RULE 1150]



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

10. DURING CONSTRUCTION, ALL WORK AREAS, DRILLING OR TRENCHING SPOILS AND UNPAVED ROADWAYS ACTIVELY IN USE SHALL BE WATERED DOWN UNTIL THE SURFACE IS MOIST AND THEN MAINTAINED IN A MOIST CONDITION TO MINIMIZE DUST.  
[RULE 403]
11. CONSTRUCTION SPOILS ARE LANDFILL TRASH, MATERIAL THAT IS MIXED WITH LANDFILL TRASH, MATERIAL THAT HAS BEEN IN CONTACT WITH LANDFILL TRASH, OR ODOROUS MATERIAL THAT IS REMOVED FROM WELL HOLES OR TRENCHES.  
[RULE 204; RULE 402, RULE 1150]
12. DURING TRANSPORT OF THE CONSTRUCTION SPOILS, NO MATERIAL SHALL EXTEND BEYOND THE SIDES OR REAR OF THE VEHICLE HAULING THE MATERIAL.  
[RULE 402; RULE 403]
13. THE EXTERIOR OF THE VEHICLE (INCLUDING THE TIRES) HAULING THE CONSTRUCTION SPOILS SHALL BE CLEANED OFF PRIOR TO LEAVING THE WORKING SITE.  
[RULE 403, RULE 1150]
14. ALL CONSTRUCTION SPOILS SHALL BE ENCAPSULATED AND TRANSPORTED IN TRUCKS OR TRAILERS WHICH ARE COVERED WITH AN IMPERMEABLE COVER WITH SUCH COVERS TIED DOWN TO PREVENT ODORS AND/OR HAZARDOUS MATERIALS FROM EMANATING FROM THE VEHICLE IF THE CONSTRUCTION SPOILS ARE TRANSPORTED OFF-SITE.  
[RULE 402; RULE 403]
15. FOAM AND CLEAN DIRT SHALL BE USED WHEN DEEMED NECESSARY BY AQMD PERSONNEL TO CONTROL ODORS RESULTING FROM THE EXPOSURE OF CONSTRUCTION SPOILS DURING THE CONSTRUCTION OF WELLS OR TRENCHES. AN EQUIVALENT METHOD MAY BE USED UPON APPROVAL BY AQMD PERSONNEL.  
[RULE 402, RULE 1150]
16. CONSTRUCTION SPOILS SHALL BE DISPOSED OF AT THE WORKING FACE PRIOR TO THE END OF EACH WORKING DAY OR AS DEEMED NECESSARY BY AQMD PERSONNEL. IF THESE MATERIALS ARE DETERMINED TO BE HAZARDOUS WASTE ACCORDING TO THE STATE AND/OR FEDERAL REGULATIONS, THEY SHALL BE PROPERLY DISPOSED OF AT FACILITIES APPROVED BY THE DEPARTMENT OF TOXIC SUBSTANCES CONTROL.  
[RULE 402; RULE 1150]
17. DURING CONSTRUCTION USING AN AIR RIG, AMBIENT AIR IN THE IMMEDIATE VICINITY OF THE WELL SHALL BE MONITORED FOR TOTAL HYDROCARBONS. IF THE LEVEL REACHES 500 PPM (AS CH<sub>4</sub>), ALL DRILLING SHALL CEASE UNTIL THE HEAD SPACE OF THE WELL IS EVACUATED AND DIRECTED TO AN OPERATING FLARE SYSTEM WITH A VALID PERMIT ISSUED BY THE AQMD.  
[RULE 402; RULE 1150]
18. DURING WELL CONSTRUCTION USING A STEM-TYPE AUGER, AN APPROVED EMISSION CONTROL BOX SHOWN IN EXHIBIT M-35 OF THE CLOSURE PLAN FOR THE CLASS I DISPOSAL AREA SHALL BE PLACED OVER THE WELL HOLE TO COLLECT LANDFILL GAS. THE COLLECTED GAS SHALL BE DIRECTED TO AN OPERATING FLARE SYSTEM WHICH HAS A VALID PERMIT ISSUED BY THE SCAQMD.  
[RULE 402; RULE 1150]



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

19. EACH WELL SHALL BE DRILLED, PLACED, BACKFILLED, COMPACTED, AND CAPPED OR CONNECTED TO THE LANDFILL GAS COLLECTION SYSTEM IN THE SAME DAY. HOWEVER, IF AT THE END OF A WORKING DAY A WELL IS NOT FINISHED, IT MAY BE COVERED WITH SUFFICIENT MATERIAL TO PREVENT LANDFILL GAS EMISSIONS IF WORK IS TO RESUME IN 24 HOURS.  
[RULE 402, RULE 1150, RULE 1150.1]
20. WELLS UNDER CONSTRUCTION SHALL NOT BE OPEN TO THE ATMOSPHERE UNLESS WORK IS BEING ACTIVELY PERFORMED ON THE WELL.  
[RULE 402, RULE 1150, RULE 1150.1]
21. EACH WELL SHALL BE SECURELY SEALED TO PREVENT ANY EMISSIONS OF LANDFILL GAS FROM AROUND THE WELL CASING.  
[RULE 402; RULE 1150, RULE 1150.1]
22. PRIOR TO CONNECTION TO EXISTING GAS COLLECTION SYSTEM, A COMPLETED WELL SHALL BE CAPPED AND ITS GAS CONTROL VALVE CLOSED TO AVOID VENTING LANDFILL GAS TO THE ATMOSPHERE.  
[RULE 402; RULE 1150, RULE 1150.1]
23. PRIOR TO WELL CONSTRUCTION, THE LANDFILL GAS COLLECTION HEADER THAT WILL SERVE THE WELLS SHALL BE INSTALLED AND BE UNDER VACUUM.  
[RULE 402; RULE 1303 (a)(1) – BACT]
24. LANDFILL GAS COLLECTED FROM NEW GAS WELLS AND HORIZONTAL GAS COLLECTION SYSTEMS SHALL BE ANALYZED FOR VOLUME FLOW AND TOTAL HYDROCARBON COMPOUNDS EXPRESSED AS METHANE ON A WEEKLY BASIS FOR AT LEAST TWO CONSECUTIVE MONTHS FROM START OF OPERATION.  
[RULE 1150.1; RULE 1303 (b)(2) – OFFSET]
25. BRANCH LINE GAS VOLUME AND METHANE CONTENT SHALL BE MEASURED AT LEAST ONCE A WEEK AND ADJUSTMENTS SHALL BE MADE AS NECESSARY AT LEAST ONCE A MONTH TO MAXIMIZE COLLECTION EFFICIENCY OF THE SYSTEM.  
[RULE 1150.1; RULE 1303 (a)(1) – BACT]
26. ANY BREAKDOWN OR MALFUNCTION OF THE SYSTEM RESULTING IN THE EMISSION OF RAW LANDFILL GAS SHALL BE REPORTED TO THE SCAQMD WITHIN ONE HOUR AFTER THE OCCURENCE AND IMMEDIATE REMEDIAL MEASURES SHALL BE UNDERTAKEN TO CORRECT THE PROBLEM AND PREVENT FURTHER EMISSIONS INTO THE ATMOSPHERE.  
[RULE 402; RULE 430]
27. MITIGATION MEASURES, OTHER THAN THOSE INDICATED IN THESE CONDITIONS, WHICH ARE DEEMED APPROPRIATE BY SCAQMD PERSONNEL AS NECESSARY TO PROTECT THE COMFORT, REPOSE, HEALTH OR SAFETY OF THE PUBLIC SHALL BE IMPLEMENTED UPON REQUEST.  
[RULE 204; RULE 402]



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**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

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**Emissions And Requirements:**

28. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

GASEOUS EMISSIONS: RULE 1150.1, 40CFR63 SUBPART AAAA- CLASS III LANDFILL.



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

**PERMIT TO OPERATE**

**Permit No. F8782  
A/N 318138**

**Equipment Description:**

LANDFILL GAS SURFACE COLLECTION SYSTEM FOR THE CLASS III FACILITY CONSISTING OF:

1. SLOTTED PVC PIPING, 1 1/2" TO 3" DIA., VARIOUS QUANTITIES AND LENGTHS, LAID ON THE LANDFILL SURFACE.
2. IMPERMEABLE BLANKET, POLYETHYLENE OR EQUIVALENT, VARIOUS WIDTHS AND LENGTHS, WITH EDGES TO BE SEALED WITH SOIL, SANDBAGS, OR OTHER SUITABLE MATERIAL, AND USED TO COVER THE SLOTTED PVC PIPING.
2. PIPING VENTED TO THE LANDFILL GAS COLLECTION SYSTEM.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. INSTANTANEOUS SURFACE MONITORING SHALL BE PERFORMED WITH AN ORGANIC VAPOR ANALYZER IMMEDIATELY AFTER PLACEMENT OF THE SURFACE EMISSIONS COLLECTOR AND EVERY TWO WORKING DAYS THEREAFTER. MONITORING SHALL BE PERFORMED AROUND THE ENTIRE PERIMETER OF THE SURFACE COLLECTOR AT THE BLANKET/SOIL INTERFACE. SURFACE MONITORING SHALL BE PERFORMED PRIOR TO THE CLOSE OF THE BUSINESS DAY. SURFACE EMISSIONS SHALL NOT EXCEED 500 PPM AS REQUIRED BY RULE 1150. 1(C)(6).  
[RULE 402; RULE 1150.1]
4. FOR ANY GIVEN LANDFILL AREA, THE SURFACE COLLECTOR SHALL NOT REMAIN IN PLACE MORE THAN 30 DAYS. REQUEST FOR EXTENSION OF THIS TIME LIMITATION SHALL BE IN WRITING TO THE AQMD.  
[RULE 1303 (b) (2) - OFFSET]
5. WRITTEN RECORDS OF THE MONITORING DATA REQUIRED BY CONDITION NO. 3 FOR THE GRID LOCATION, DATES OF INSTALLATION, REMOVAL AND SIZE OF THE SURFACE COLLECTOR SHALL BE MAINTAINED ON FILE AT THE LANDFILL OFFICE AREA FOR A MINIMUM OF TWO YEARS. THESE RECORDS SHALL BE MADE AVAILABLE UPON REQUEST OF AQMD PERSONNEL.  
[RULE 204; RULE 1150.1]



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**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

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6. ONLY ONE SURFACE EMISSIONS COLLECTOR SYSTEM SHALL BE IN USE AT ANY TIME.  
[RULE 1303 (b)(2) – OFFSET]
  
7. MITIGATION MEASURES, OTHER THAN THOSE INDICATED BY THE ABOVE CONDITIONS,  
WHICH ARE DEEMED APPROPRIATE BY THE EXECUTIVE OFFICER AS NECESSARY TO PROTECT  
THE COMFORT, REPOSE, HEALTH, OR SAFETY OF THE PUBLIC SHALL BE IMPLEMENTED UPON  
REQUEST.  
[RULE 204; RULE 402]

**Emissions And Requirements:**

8. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES  
AND REGULATIONS:

GASEOUS EMISSIONS: RULE 1150.1, 40CFR63 SUBPART AAAA- CLASS III LANDFILL.



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

**PERMIT TO OPERATE**

**Permit No. F16829  
A/N 338917**

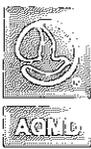
**Equipment Description:**

LANDFILL GAS CONDENSATE/LEACHATE COLLECTION AND STORAGE SYSTEM (CLASS I & CLASS III)  
CONSISTING OF:

1. LANDFILL GAS CONDENSATE/LEACHATE COLLECTION AND CONVEYANCE TO THE LEACHATE TREATMENT PLANT, WITH ABOVE GROUND PVC PIPING 2" TO 30" DIA.
2. LCRS SUMP, 6'-6" DIA. X 10' L., 2500 GALLON CAPACITY, WITH ASSOCIATED PUMPS.
3. TWO LEACHATE TRANSFER TANKS, A & B, EACH 7'-6" DIA. X 11'-6" H., WITH 2700 GALLON CAPACITY AND ASSOCIATED PUMPS.
4. TANK, NORTH ACCESS ROAD SUMP NO. 1, 6' DIA. X 60' H., 13,000 GALLON CAPACITY, WITH ONE PUMP.
5. TANK, NORTH ACCESS ROAD SUMP NO. 2, 5' DIA. X 10' H., 1600 GALLON CAPACITY, WITH ONE PUMP.
6. TANK, NOGALES SUMP, 5' DIA. X 10' H., 1600 GALLON CAPACITY, WITH ONE PUMP.
7. TWO TANKS, GP200 SUMP AND GP400 SUMP, EACH 2' DIA. X 11' L., 270 GALLON CAPACITY.
8. TANK, MS1 SUMP, 1'-6" DIA. X 11' L., 150 GALLON CAPACITY.
9. TANK, NORTH FIRE BREAK ROAD/ 500 LINE SUMP, 2'-6" DIA. X 20' L., 350 GALLON CAPACITY.
10. STORAGE TANKS (RENTAL), BAKER TYPE, UP TO SIX (6), 22,000 GALLON CAPACITY EACH, USED AS AUXILIARY SUPPORT OR EMERGENCY EQUIPMENT.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED AND MAINTAINED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.  
[RULE 204]



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**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

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4. LANDFILL GAS CONDENSATE/LEACHATE COLLECTION SYSTEM SHALL BE OPERATED UNDER ADEQUATE VACUUM.  
[RULE 402; RULE 1303 (a) (1) – BACT]
  
5. THE LANDFILL GAS CONDENSATE/LEACHATE COLLECTION AND STORAGE SYSTEM SHALL OPERATE AS A CLOSED SYSTEM VENTING TO THE EXISTING LANDFILL GAS FLARE STATIONS, GAS TURBINE OR BOILER WHICH ARE IN FULL USE, CAN ADEQUATELY PROCESS THE VOLUME OF GAS COLLECTED, AND HAVE BEEN ISSUED A VALID PERMIT TO CONSTRUCT OR OPERATE BY THE AQMD.  
[RULE 402; RULE 1303 (a) (1) – BACT]
  
6. ALL RECORDS SHALL BE KEPT AND MAINTAINED FOR AT LEAST FIVE (5) YEARS AND MADE AVAILABLE TO THE AQMD PERSONNEL UPON REQUEST.  
[RULE 204]



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

**PERMIT TO OPERATE**

**Permit No. F25256  
A/N 353233**

**Equipment Description:**

LANDFILL GAS COLLECTION SYSTEM (CLASS-1) CONSISTING OF:

1. UP TO 2017 VERTICAL AND HORIZONTAL GAS COLLECTION WELLS, AS NECESSARY. (EXCLUDES MONITORING WELLS AND PROBES AND, LEACHATE AND GROUNDWATER EXTRACTION WELLS).
2. ABOVE-GROUND GAS CONVEYANCE SYSTEM, PVC AND HDPE PIPING, 2" TO 12" DIA.
3. FOUR (4) GAS HEADERS WHICH CONVEY GAS INTO ONE OR BOTH OF TWO PERMITTED FLARE STATIONS:
  - A) HEADER LAO AT FLARE STATION NO. 1 (18" TO 30" DIAMETER)
  - B) HEADER LA1 AT FLARE STATION NO. 1 (18" TO 30" DIAMETER)
  - C) HEADER LBO AT FLARE STATION NO. 2 (18" TO 30" DIAMETER)
  - D) HEADER LBI AT FLARE STATION NO. 2 (18" TO 30" DIAMETER)
3. UP TO FOUR (4) BOOSTER BLOWERS, AS NECESSARY:
  - A) LYNN COURT PERIMETER BLOWER, 15 H.P. (TYPICAL)
  - B) NOGALES PERIMETER BLOWER, 40 H.P. (TYPICAL)
  - C) RIDGE ROAD SYSTEM BLOWER, 30 H.P. (TYPICAL)
  - D) PERIMETER SYSTEM BLOWER, 30 H.P. (TYPICAL)

**Conditions:**

1. CONSTRUCTION AND OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW. IF ANY DEVIATION OF THE SUBMITTED DATA AND DRAWINGS OF THE GAS COLLECTION SYSTEM IS REQUIRED OR PROPOSED, BKK SHALL SUBMIT IN DUPLICATE A WRITTEN DESCRIPTION OF THE REASONS THE DEVIATION IS REQUIRED, PROPOSED CHANGES AND DRAWINGS AT LEAST 30 DAYS PRIOR TO CONSTRUCTION FOR THE AQMD'S APPROVAL. WORK SHALL NOT COMMENCE UNTIL AFTER WRITTEN APPROVAL IS GIVEN BY THE SCAQMD.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. A SHUT-OFF VALVE AND SAMPLING PORT SHALL BE INSTALLED AT EACH VERTICAL AND HORIZONTAL WELL HEAD.  
[RULE 1303 (a)(1) - BACT]



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

4. ALL LANDFILL GAS COLLECTED BY THE EQUIPMENT SHALL BE DIRECTED TO THE FLARES OR A GAS TURBINE OR BOILER WHICH IS IN FULL USE AND WHICH HAVE BEEN ISSUED A VALID PERMIT FROM THE SCAQMD AND WHICH CAN ADEQUATELY PROCESS THE VOLUME OF GAS COLLECTED.  
[RULE 402; RULE 1150.1; RULE 1303 (a) (1)-BACT]
5. ALL PIPING SHALL BE SEALED AT ALL OPENINGS TO PREVENT LANDFILL GAS FROM ESCAPING FROM THE LINE INTO THE ATMOSPHERE.  
[RULE 402]
6. THE STATIC PRESSURE INDICATORS INSTALLED ACROSS THE BOOSTER BLOWERS SHALL BE MAINTAINED IN GOOD WORKING CONDITION AND SHALL INDICATE STATIC PRESSURE IN INCHES OF WATER COLUMN.  
[RULE 402; RULE 1303 (a) (1)-BACT]
7. A SHUT-OFF VALVE OR OTHER GAS FLOW ISOLATING DEVICE APPROVED BY THE AQMD SHALL BE INSTALLED AT EACH CONDENSATE LINE FROM THE HORIZONTAL GAS COLLECTION WELL SHOWN.  
[RULE 1303 (a) (1) - BACT]
8. NO MORE THAN 100 LINEAR FEET OF TRENCH WHICH EXPOSES LANDFILL MATERIAL TO THE ATMOSPHERE SHALL BE OPEN AT ANY TIME PRIOR TO BACKFILLING.  
[RULE 402, RULE 1150]
9. PRIOR TO BACKFILLING, OPEN TRENCHES SHALL BE COVERED AT ALL TIMES EXCEPT WHEN ACTUAL WORK ON THE TRENCH IS IN PROGRESS.  
[RULE 402, RULE 1150]
10. DURING CONSTRUCTION, ALL WORKING AREAS, CONSTRUCTION SPOILS AND UNPAVED ROADWAYS SHALL BE WATERED DOWN UNTIL THE SURFACE IS MOIST AND THEN MAINTAINED IN A MOIST CONDITION TO MINIMIZE DUST.  
[RULE 403]
11. CONSTRUCTION SPOILS ARE LANDFILL TRASH, MATERIAL THAT IS MIXED WITH LANDFILL TRASH, MATERIAL THAT HAS BEEN IN CONTACT WITH LANDFILL TRASH, OR ODOROUS MATERIAL EXCAVATED DURING CONSTRUCTION OF THE LANDFILL GAS COLLECTION SYSTEM.  
[RULE 204; RULE 402, RULE 1150]
12. DURING LOADING AND TRANSPORT OF CONSTRUCTION SPOILS, NO MATERIAL SHALL EXTEND ABOVE THE SIDES OR REAR OF THE TRUCK OR TRAILER WHICH WILL HAUL THE MATERIAL.  
[RULE 402; RULE 403]
13. THE EXTERIOR OF TRUCKS HAULING THE CONSTRUCTION SPOILS SHALL BE CLEANED OFF PRIOR TO LEAVING THE SITE.  
[RULE 403]



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

14. ALL CONSTRUCTION SPOILS SHALL BE ENCAPSULATED AND TRANSPORTED IN TRUCKS OR TRAILERS WHICH ARE COVERED WITH AN IMPERMEABLE COVER WITH SUCH COVERS TIED DOWN TO PREVENT ODORS AND/OR HAZARDOUS MATERIALS FROM EMANATING FROM THE VEHICLE IF THE CONSTRUCTION SPOILS ARE TRANSPORTED OFF-SITE.  
[RULE 402; RULE 403]
15. FOAM OR CLEAN DIRT SHALL BE USED WHEN DEEMED NECESSARY BY THE AQMD PERSONNEL TO CONTROL ODORS RESULTING FROM THE EXPOSURE OF CONSTRUCTION SPOILS DURING THE CONSTRUCTION OF WELLS OR TRENCHES. AN EQUIVALENT METHOD MAY BE USED UPON APPROVAL BY THE EXECUTIVE OFFICER.  
[RULE 402, RULE 1150]
16. CONSTRUCTION SPOILS SHALL BE DISPOSED OF AT THE WORKING FACE PRIOR TO THE END OF EACH WORKING DAY OR AS DEEMED NECESSARY BY AQMD PERSONNEL. IF THESE MATERIALS ARE DETERMINED TO BE HAZARDOUS WASTE ACCORDING TO STATE AND/OR FEDERAL REGULATIONS, THEY SHALL BE PROPERLY DISPOSED OF AT FACILITIES APPROVED BY THE STAFF OF THE DEPARTMENT OF TOXIC SUBSTANCES CONTROL.  
[RULE 402; RULE 1150]
17. DURING WELL CONSTRUCTION USING AN AIR RIG, AMBIENT AIR IN THE IMMEDIATE VICINITY OF THE WELL SHALL BE MONITORED FOR TOTAL HYDROCARBONS. IF THE LEVEL REACHES 500 PPM (AS CH<sub>4</sub>), ALL DRILLING SHALL CEASE UNTIL THE HEADSPACE OF THE WELL IS EVACUATED AND DIRECTED TO AN OPERATING FLARE SYSTEM WITH A VALID PERMIT ISSUED BY THE SCAQMD.  
[RULE 402; RULE 1150.1; RULE 1303 (a)(1) – BACT; RULE 1150]
18. DURING WELL CONSTRUCTION USING A STEM-TYPE AUGER, AN APPROVED EMISSION CONTROL BOX SHOWN IN EXHIBIT M-35 OF THE CLOSURE PLAN FOR THE CLASS I DISPOSAL AREA SHALL BE PLACED OVER THE WELL TO COLLECT LANDFILL GAS AND VENT IT TO AN OPERATING FLARE SYSTEM WITH A VALID PERMIT ISSUED BY THE SCAQMD.  
[RULE 402; RULE 1303 (a) (1) – BACT]
19. EACH WELL SHALL BE DRILLED, PLACED, BACKFILLED, COMPACTED, AND CAPPED OR CONNECTED TO THE LANDFILL GAS COLLECTION SYSTEM IN THE SAME DAY. HOWEVER, IF AT THE END OF A WORKING DAY A WELL IS NOT FINISHED, IT MAY BE COVERED WITH SUFFICIENT MATERIAL TO PREVENT LANDFILL GAS EMISSIONS IF WORK IS TO RESUME WITHIN 24 HOURS.  
[RULE 402, RULE 1150]
20. WELLS UNDER CONSTRUCTION SHALL NOT BE LEFT OPEN TO THE ATMOSPHERE UNLESS WORK IS BEING ACTIVELY PERFORMED ON THE WELL.  
[RULE 402; RULE 1150]
21. EACH WELL SHALL BE SECURELY SEALED TO PREVENT EMISSIONS OF LANDFILL GAS FROM AROUND THE WELL CASING.  
[RULE 402; RULE 1150, RULE 1150.1, RULE 1303 (a) (1) – BACT]



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

22. PRIOR TO CONNECTION TO THE EXISTING GAS COLLECTION SYSTEM, A COMPLETED WELL SHALL BE CAPPED AND ITS GAS CONTROL VALVE CLOSED TO AVOID VENTING LANDFILL GAS TO THE ATMOSPHERE  
[RULE 402; RULE 1150.1].
23. PRIOR TO WELL CONSTRUCTION, THE LANDFILL GAS COLLECTION HEADER THAT WILL SERVE THE WELLS SHALL BE INSTALLED AND UNDER VACUUM.  
[RULE 402; RULE 1303 (a)(1) – BACT]
24. LANDFILL GAS COLLECTED FROM THE ADDITIONAL GAS WELLS AND HORIZONTAL GAS COLLECTION SYSTEMS SHALL BE ANALYZED FOR VOLUME FLOW AND TOTAL HYDROCARBON COMPOUNDS EXPRESSED AS METHANE ON A WEEKLY BASIS FOR AT LEAST TWO CONSECUTIVE MONTHS FROM START OF OPERATION.  
[RULE 1150.1; RULE 1303 (b) (2) – OFFSET]
25. BRANCH LINE GAS VOLUME AND METHANE CONTENT SHALL BE MEASURED AT LEAST ONCE A WEEK AND ADJUSTMENTS SHALL BE MADE AS NECESSARY AT LEAST ONCE A MONTH TO MAXIMIZE COLLECTION EFFICIENCY OF THE SYSTEM.  
[RULE 1150.1; RULE 1303 (a) (1) – BACT]
26. ALL RECORDS SHALL BE KEPT FOR AT LEAST FIVE (5) YEARS IN A FORM APPROVED BY THE SCAQMD MANAGER OF PUBLIC FACILITIES AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.  
[RULE 204]
27. ANY BREAKDOWN OR MALFUNCTION OF THE SYSTEM RESULTING IN THE EMISSION OF RAW LANDFILL GAS SHALL BE REPORTED TO THE SCAQMD MANAGER OF TOXICS AND WASTE MANAGEMENT TEAM WITHIN ONE HOUR AFTER OCCURRENCE AND IMMEDIATE REMEDIAL MEASURES SHALL BE UNDERTAKEN TO CORRECT THE PROBLEM AND PREVENT FURTHER EMISSIONS INTO THE ATMOSPHERE.  
[RULE 402; RULE 430; RULE; RULE 1150.1]
28. MITIGATION MEASURES, OTHER THAN THOSE INDICATED IN THESE CONDITIONS, WHICH ARE DEEMED APPROPRIATE BY THE EXECUTIVE OFFICER AS NECESSARY TO PROTECT THE COMFORT, REPOSE, HEALTH, OR SAFETY OF THE PUBLIC SHALL BE IMPLEMENTED UPON REQUEST.  
[RULE 204; RULE 402; RULE 1150]

### Emissions And Requirements:

29. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:  
  
NMOC: RULE 1150.1.



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

**PERMIT TO CONSTRUCT / OPERATE**

**Permit No. F89452  
A/N 463215**

**Equipment Description:**

INTERNAL COMBUSTION ENGINE, IVECO N.V., DIESEL-FUELED, CURSOR 10 ENT (TIER 3) SERIES, MODEL NO. F3AE9685, SERIAL NUMBER 82075, 6 CYLINDERS, FOUR CYCLES, TURBOCHARGED, AFTERCOOLED, 449 BHP, DRIVING AN EMERGENCY ELECTRICAL GENERATOR AT FLARE STATION NO. 1.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED, UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITIONS AT ALL TIMES.  
[RULE 204]
3. THIS ENGINE SHALL NOT BE OPERATED MORE THAN A TOTAL OF 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NO MORE THAN 50 HOURS FOR MAINTENANCE AND PERFORMANCE TESTING.  
[RULE 1110.2; 1303-BACT, 1304(a) (4)-MODELING AND OFFSET EXEMPTIONS]
4. OPERATION BEYOND THE 50 HOURS PER YEAR ALLOTTED FOR ENGINE MAINTENANCE AND TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE UTILITY DISTRIBUTION COMPANY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE. ENGINE OPERATION SHALL BE TERMINATED IMMEDIATELY AFTER THE UTILITY DISTRIBUTION COMPANY ADVISES THAT A ROTATING OUTAGE IS NO LONGER IMMINENT OR IN EFFECT.  
[RULE 1303- BACT]
5. THIS ENGINE SHALL NOT BE USED AS PART OF AN INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO DO SO BY THE UTILITY OR THE GRID OPERATOR.  
[RULE 1303-BACT]
6. AN OPERATIONAL NON-RESETTABLE ELAPSED TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.  
[RULE 1110.2; 1303-BACT, 1304(a) (4)-MODELING AND OFFSET EXEMPTIONS]



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

7. AN ENGINE OPERATING LOG SHALL BE MAINTAINED WHICH ON A MONTHLY BASIS SHALL LIST ALL ENGINE OPERATIONS IN EACH OF THE FOLLOWING AREAS:

A. EMERGENCY USE HOURS OF OPERATION

B. MAINTENANCE AND TESTING HOURS

C. OTHER OPERATING HOURS (DESCRIBE THE REASON FOR OPERATION)

IN ADDITION, EACH TIME THE ENGINE IS STARTED MANUALLY, THE LOG SHALL INCLUDE THE DATE OF OPERATION AND THE TIMER READING IN HOURS AT THE BEGINNING AND END OF OPERATION. THE LOG SHALL BE KEPT FOR A MINIMUM OF FIVE CALENDAR YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST. THE TOTAL HOURS OF OPERATION FOR THE PREVIOUS CALENDAR YEAR SHALL BE RECORDED SOMETIME DURING THE FIRST 15 DAYS OF JANUARY OF EACH YEAR.

[RULE 1110.2, 1303-BACT, 1304(a) (4)-MODELING AND OFFSET EXEMPTIONS, 1470]

8. THIS ENGINE SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.  
[RULE 431.2, 1470]

### Emissions And Requirements:

9. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM:	RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM:	0.15 gm/bhp-hr, RULE 1303 – BACT, 1470
NO <sub>x</sub> +NMHC:	3.0 g/bhp-hr, RULE 1303-BACT, 1470
CO:	2.6 g/bhp-hr, RULE 1303-BACT, 1470



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### PERMIT TO CONSTRUCT/OPERATE

Permit No. G16802  
A/N 526097

#### Equipment Description:

- A. LANDFILL LEACHATE AND CONDENSATE TREATMENT FACILITY CONSISTING OF:**
1. SIX INFLUENT EQUALIZATION TANKS (T-1 THROUGH T-6), 20,000 GALLONS EACH, WITH TWO CIRCULATION PUMPS, TWO STRAINERS, AND TWO TRANSFER PUMPS, VENTED TO THE OFF-GAS SYSTEM.
  2. ONE PHOSPHORIC ACID STORAGE TANK AND ONE SODIUM HYDROXIDE STORAGE TANK (T-12 AND T-13), 250 GALLONS EACH, WITH ASSOCIATED PUMPS.
  3. TWO AERATION TANKS (T-10 AND T-11), 73,500 GALLONS EACH, WITH TWO BLOWERS AND POWDERED ACTIVATED CARBON FEED SYSTEM, AND ASSOCIATED PUMPS.
  4. SECONDARY CLARIFIER (ME-5), 1300 CU. FT., 14'-0" DIA. X 12'-0" H., WITH A POLYMER FEED SYSTEM, AN ACTIVATED SLUDGE RECYCLE SYSTEM, AND A WASTE ACTIVATED SLUDGE DISCHARGE SYSTEM.
  5. SECONDARY CLARIFIER (NEW, ME-5A), CENTER FEED, 14'-0" DIA. X 16'-0" H., 50,000 GALLONS PER DAY CAPACITY, WITH A POLYMER FEED SYSTEM, AN ACTIVATED SLUDGE RECYCLE SYSTEM, AND A WASTE ACTIVATED SLUDGE DISCHARGE SYSTEM.
  6. TWO WASTE ACTIVATED SLUDGE TANKS (T-18 AND T-19), AERATED, 9,000 GALLONS EACH, WITH A MECHANICAL MIXER, VENTED TO THE OFF GAS SYSTEM, AND THREE SLUDGE PUMPS.
  7. TWO PLATE AND FRAME FILTER PRESSES, WITH A POLYMER FEED SYSTEM, A FILTRATE DRAINAGE SYSTEM, AND THREE SLUDGE HANDLING AIR COMPRESSORS.
  8. TWO EFFLUENT STORAGE TANKS, (T-16 AND T-17), 45,000 GALLONS EACH WITH TWO CIRCULATION PUMPS AND TWO EFFLUENT TRANSFER PUMPS.
  9. THREE OFF-GAS BLOWERS, VENTING THE LEACHATE AND CONDENSATE TREATING FACILITY AND THE AIR STRIPPING SYSTEM EXHAUSTING TO THE LANDFILL GAS MANAGEMENT SYSTEM.
  10. CHLORINE INJECTION SYSTEM AND ASSOCIATED METERING EQUIPMENT.
  11. NINE CONTAINMENT SUMPS WITH SUMP PUMPS.



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

- B. CONTAMINATED GROUNDWATER TREATMENT FACILITY (30,000 GALLON PER DAY) CONSISTING OF:**
1. INFLUENT HOLDING TANK (T-7), 2,500 GALLONS, WITH ASSOCIATED PUMPS, VENTED TO THE OFF-GAS SYSTEM.
  2. TWO AIR STRIPPERS (ME-1 AND ME-2), 2'-0" DIA. X 24'-0" H., PACKED COLUMN WITH MIST ELIMINATORS, ASSOCIATED PUMPS AND TWO STRIPPER BLOWERS.
  3. EFFLUENT TRANSFER TANK (T-8), 1250 GALLONS, WITH ASSOCIATED PUMPS, VENTED TO THE OFF-GAS SYSTEM.
- C. MEDIA FILTRATION SYSTEM (NEW ADDITION) FOR ARSENIC TREATMENT, CONSISTING OF:**
1. THREE (3) TANKS, IN SERIES, CLOSED PRESSURE VESSELS, EACH TANK 30 CUBIC FEET CAPACITY, CONTAINING GRANULAR ARSENIC ADSORBENT MEDIA AND EQUIPPED WITH TEMPERATURE, PRESSURE GAUGES AND LIQUID SAMPLING VALVES.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.  
[RULE 204]
4. THIS PERMIT SHALL EXPIRE IF CONSTRUCTION OF THE NEW MEDIA FILTRATION SYSTEM FOR ARSENIC TREATMENT IS NOT COMPLETED WITHIN ONE YEAR FROM MARCH 16, 2012, UNLESS AN EXTENSION IS GRANTED BY THE EXECUTIVE OFFICER.  
[RULE 205]
5. THE FOLLOWING TANKS SHALL BE EQUIPPED WITH VISIBLE LIQUID LEVEL GAUGES APPROVED BY THE EXECUTIVE OFFICER. LIQUID SHALL NOT OVERFLOW FROM TANKS, T-1 THROUGH T-8, T-10 AND T-11.
  - A. SIX INFLUENT EQUALIZATION TANKS, T-1 THROUGH T-6.
  - B. AERATION TANKS (T-10 AND T-11)
  - C. SLUDGE STORAGE TANKS (T-18 AND T-19).

[RULE 402; RULE 1303(a)(1)-BACT]



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

6. FLOW INDICATORS SHALL BE MAINTAINED IN EACH OF THE AIR SUPPLY LINES OF THE SLUDGE STORAGE TANK AIR DIFFUSER SYSTEMS.  
[RULE 204; RULE 402]
7. THE INFLUENT FLOW INDICATOR (GPM) AND TOTALIZER APPROVED BY THE EXECUTIVE OFFICER SHALL BE MAINTAINED TO RECORD THE QUANTITY OF INFLUENT TREATED. A STRIP CHART RECORDER SHALL BE MAINTAINED TO CONTINUOUSLY MEASURE AND RECORD INFLUENT FLOW, AND A TOTALIZER SHALL RECORD THE INFLUENT TREATED ON THE CHART RECORDER, AT 0600 HOURS EACH DAY.  
[RULE 204; RULE 1303(b) (2)-OFFSET]
8. FLOW INDICATING AND RECORDING DEVICES APPROVED BY THE EXECUTIVE OFFICER SHALL BE MAINTAINED TO RECORD THE QUANTITY OF OFF GASES VENTED TO THE FLARES. THE FLOW INDICATING AND RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO TIME OF DAY.  
[RULE 204; RULE 1303(a) (1)-BACT; RULE 1303(b) (2)-OFFSET]
9. THE FLOW INDICATOR AND TOTALIZER APPROVED BY THE EXECUTIVE OFFICER SHALL BE MAINTAINED ON THE AIR STRIPPER TANK DISCHARGE TO MEASURE AND RECORD THE QUANTITY OF LIQUID TREATED. A STRIP CHART RECORDER SHALL BE MAINTAINED TO CONTINUOUSLY MEASURE AND RECORD FLOW, AND A TOTALIZER SHALL RECORD THE QUANTITY OF LIQUID TREATED ON THE CHART RECORDER, AT 0600 HOURS EACH DAY.  
[RULE 204; RULE 1303(b) (2)-OFFSET]
10. THE OFF GASES FROM THE STORAGE TANKS OR AIR STRIPPERS SHALL BE DIRECTED TO AN OPERATIONAL FLARE OR TO THE LANDFILL GAS COLLECTION SYSTEM, EACH WITH A VALID PERMIT ISSUED BY THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT.  
[RULE 1303(a) (1)-BACT]
11. SAMPLE PORTS APPROVED BY THE EXECUTIVE OFFICER SHALL BE MAINTAINED IN THE OFF GAS BLOWER HEADER SYSTEM DOWN STREAM OF THE FOLLOWING EQUIPMENT TO ALLOW THE COLLECTION OF A GAS SAMPLE:
  - A. SIX INFLUENT EQUALIZATION TANKS, T-1 THROUGH T-6.
  - B. INFLUENT HOLDING TANK, T-7.
  - C. AIR STRIPPER EFFLUENT TRANSFER TANK, T-8.
  - D. AIR STRIPPER COLUMNS ME-1 AND ME-2.
  - E. AERATION TANKS T-10 AND T-11.
  - F. SLUDGE STORAGE TANKS T-18 AND T-19.[RULE 217; RULE 1303(b) (2)-OFFSET]
12. A MINIMUM OF 15 SCFM OF AIR SHALL BE DIRECTED TO EACH SLUDGE STORAGE TANK (T-18 AND T-19) AIR DIFFUSER SYSTEM WHENEVER THE TANK CONTAINS SLUDGE, EXCEPT DURING DECANTING OPERATIONS.  
[RULE 402]



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

13. THE AIR STRIPPERS (ME-1 AND ME-2) SHALL NOT BE OPERATED SIMULTANEOUSLY WITH THE LEACHATE AND CONDENSATE TREATMENT FACILITY, EXCEPT WHEN THE AIR STRIPPERS ARE USED TO TREAT THE "GREY WATER" AS DEFINED BY THIS PERMIT.  
[RULE 402; RULE 1303(b) (2)-OFFSET]
14. THE LEACHATE AND CONDENSATE TREATMENT FACILITY SYSTEM SHALL NOT TREAT MORE THAN 100,000 GALLONS OF LIQUID PER DAY.  
[RULE 402; RULE 1303(b) (2)-OFFSET]
15. THE AIR STRIPPERS SHALL NOT TREAT MORE THAN 24,215 GALLONS OF LIQUID PER DAY, EXCEPT WHEN THE SYSTEM IS USED TO TREAT "GREY WATER", AND THEN THE SYSTEM SHALL NOT TREAT MORE THAN 30,000 GALLONS PER DAY. "GREY WATER" SHALL BE AS DEFINED BY THIS PERMIT.  
[RULE 402; RULE 1303(b) (2)-OFFSET]
16. THE TOTAL VOLUME OF OFF GASES COLLECTED AND VENTED TO THE FLARES SHALL NOT EXCEED 2000 SCFM.  
[RULE 1303(b) (2)-OFFSET]
17. LIQUID SHALL NOT BE DIRECTED TO INFLUENT HOLDING TANK "A" (T-7) UNLESS THE OFF GAS BLOWER SYSTEM IS IN FULL OPERATION.  
[RULE 1303(a) (1)-BACT]
18. THE SLUDGE SHALL BE HANDLED AND DISPOSED OF AS A HAZARDOUS MATERIAL UNTIL THE APPROPRIATE AGENCIES MAKE THE DETERMINATION THAT THE SLUDGE IS NOT A HAZARDOUS MATERIAL. BKK CORPORATION SHALL GIVE WRITTEN NOTICE TO AQMD THAT THE APPROPRIATE AGENCIES HAVE MADE THE DETERMINATION THAT THE SLUDGE IS NOT A HAZARDOUS MATERIAL IF AND WHEN THIS OCCURS.  
[RULE 204; RULE 402]
19. ALL STORAGE BINS CONTAINING SLUDGE SHALL BE KEPT COVERED AT ALL TIMES EXCEPT DURING ACTUAL LOADING OPERATIONS FROM THE FILTER PRESSES OR UNLOADING OPERATIONS, AS REQUIRED.  
[RULE 402]
20. THE SLUDGE SHALL BE TRANSPORTED IN SUCH A MANNER AS TO PREVENT ANY EMISSIONS OF HAZARDOUS MATERIALS.  
[RULE 402]
21. THE SLUDGE CONTAINERS SHALL BE LABELED AND PROPERLY MANIFESTED ACCORDING TO THE PROCEDURES OUTLINED IN CCR TITLE 22, 66262.30-47.  
[RULE 204]
22. SAMPLES OF THE INFLUENT TO AND EFFLUENT FROM THE AIR STRIPPERS SHALL BE TESTED FOR ALL COMPOUNDS REQUIRED UNDER BKK LANDFILL GROUNDWATER MONITORING PROGRAM.  
[RULE 1303(b) (2)-OFFSET]



**FACILITY PERMIT TO OPERATE  
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23. THE TREATED EFFLUENT FROM THE LEACHATE TREATMENT PLANT USED FOR DUST CONTROL AND/OR IRRIGATION PURPOSES SHALL NOT CONTAIN MORE THAN 0.52 mg/l OF TOTAL VOLATILE PRIORITY AND VOLATILE NON-PRIORITY POLLUTANTS, AT ITS POINT OF USE (AT THE DISCHARGE POINT FROM THE CLOSED-TOP MILLION GALLON RESERVOIR WATER TANK), AS SHOWN IN VOLUME I OF THE OPERATION PLAN, APPENDIX C, TYPICAL ANALYTICAL REPORT OF INFLUENT, EFFLUENT AND SLUDGE.  
[RULE 402]
24. THE TREATED EFFLUENT FROM THE LEACHATE TREATMENT PLANT USED FOR DUST CONTROL AND/OR IRRIGATION PURPOSES SHALL NOT CONTAIN MORE THAN 0.1 mg/l OF BASE/NEUTRAL AND ACID EXTRACTABLE PRIORITY POLLUTANTS AS SHOWN, AT ITS POINT OF USE (AT THE DISCHARGE POINT FROM THE CLOSED-TOP MILLION GALLON RESERVOIR WATER TANK), AS SHOWN IN VOLUME I OF THE OPERATION PLAN, APPENDIX C, TYPICAL ANALYTICAL REPORT OF INFLUENT, EFFLUENT AND SLUDGE.  
[RULE 402]
25. THE TREATED EFFLUENT FROM THE LEACHATE TREATMENT PLANT USED FOR DUST CONTROL AND/OR IRRIGATION PURPOSES SHALL NOT CONTAIN MORE THAN 0.01 mg/l OF PRIORITY POLLUTANT PESTICIDES AND POLYCHLORINATED BIPHENYLS, AT ITS POINT OF USE (AT THE DISCHARGE POINT FROM THE CLOSED-TOP MILLION GALLON RESERVOIR WATER TANK), AS SHOWN IN VOLUME I OF THE OPERATION PLAN, APPENDIX C, TYPICAL ANALYTICAL REPORT OF INFLUENT, EFFLUENT AND SLUDGE.  
[RULE 403]
26. THE TREATED EFFLUENT FROM THE LEACHATE TREATMENT PLANT USED FOR DUST CONTROL AND/OR IRRIGATION PURPOSES SHALL NOT CONTAIN MORE THAN 1.5 mg/l OF TOTAL HEAVY METALS, AT ITS POINT OF USE (AT THE DISCHARGE POINT FROM THE CLOSED-TOP MILLION GALLON RESERVOIR WATER TANK), INCLUDING:
- A. ARSENIC
  - B. BERYLLIUM
  - C. CADMIUM
  - D. CHROMIUM
  - E. LEAD
  - F. MERCURY
  - G. NICKEL
  - H. SELENIUM
  - I. SILVER
- [RULE 403]
27. GRANULAR ARSENIC ADSORBENT MEDIA TREATMENT SYSTEM SHALL BE OPERATED AND MONITORED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS. SYSTEM OPERATING PARAMETERS MEASURED: SUCH AS TEMPERATURE, PRESSURE DROP ACROSS MEDIA VESSEL, PH, BACKWASH FREQUENCY, MEDIA REPLACEMENT EVENT DATES, SETC., SHALL BE RECORDED AND KEPT ON FILE.  
[RULE 204]



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28. THE EFFLUENT FROM THE MEDIA FILTRATION SYSTEM, FOR ARSENIC CONCENTRATION REDUCTION, SHALL MEET THE CURRENT WASTE DISCHARGE REQUIREMENTS (WDRS) SET BY LARWQCB, AS LISTED BELOW,

ARSENIC (IN EFFLUENT) 10 MICROGRAMS/LITER (µg/L)  
[RULE 204]

29. THE TREATED EFFLUENT FROM THE LEACHATE TREATMENT PLANT USED FOR DUST CONTROL AND/OR IRRIGATION PURPOSES SHALL NOT CONTAIN MORE THAN THE FOLLOWING (CURRENT CALIFORNIA DRINKING WATER STANDARDS), AT ITS POINT OF USE (AT THE DISCHARGE POINT FROM THE CLOSED-TOP MILLION GALLON RESERVOIR WATER TANK):

	CONSTITUENT	MAX. LIMIT (mg/l)
A.	CADMIUM	0.005
B.	CHROMIUM	0.05
C.	LEAD	0.015
D.	MERCURY	0.002

[RULE 403]

30. THE TREATED EFFLUENT FROM THE LEACHATE TREATMENT PLANT AT ITS POINT OF USE (AT THE DISCHARGE POINT FROM THE CLOSED-TOP MILLION GALLON RESERVOIR WATER TANK), FOR DUST CONTROL AND/OR IRRIGATION PURPOSES SHALL HAVE NO ODORS AS DETERMINED BY THE ON-SITE AQMD REPRESENTATIVE.

[RULE 402]

31. THE OPERATION OF THE LEACHATE TREATMENT PLANT SHALL NOT RESULT IN THE EMISSION OF UNTREATED OFF GASES TO THE ATMOSPHERE.

[RULE 402; RULE 1303(a) (1)-BACT]

32. ALL RECORDS SHALL BE MAINTAINED AND KEPT FOR AT LEAST FIVE YEARS, AND SHALL BE MADE AVAILABLE TO THE AQMD PERSONNEL UPON REQUEST.

[RULE 204]

33. FOR PURPOSES OF THIS PERMIT, "GREY WATER" IS DEFINED AS THE WATER PUMPED FROM EXTRACTION WELLS BENEATH AND/OR OUTSIDE OF THE WASTE DISPOSAL AREA THAT MEETS THE TREATED EFFLUENT STANDARDS AS SPECIFIED IN CONDITION NOS. 22 THROUGH 27 ABOVE AND CONTAINS NO MORE THAN THE FOLLOWING:

TOTAL VOLATILE ORGANICS	2 MG/L
METHYLENE CHLORIDE	150 µG/L
CHLOROFORM	150 µG/L
1,2 DICHLOROETHANE	700 µG/L
CARBON TETRACHLORIDE	5 µG/L
TRICHLOROETHYLENE	150 µG/L
BENZENE	550 µG/L
VINYL CHLORIDE	300 µG/L

[RULE 402; RULE 1303(b) (2)-OFFSET]



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### RULE 219 EQUIPMENT

**Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS.

**Periodic Monitoring:**

1. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE AQMD, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

FOR ARCHITECTURAL APPLICATIONS WHERE NO THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN SEMI-ANNUAL RECORDS OF ALL COATINGS CONSISTING OF (a) COATING TYPE, (b) VOC CONTENT AS SUPPLIED IN GRAMS PER LITER (g/l) OF MATERIALS FOR LOW-SOLIDS COATINGS, (c) VOC CONTENT AS SUPPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING.

FOR OTHER ARCHITECTURAL APPLICATIONS WHERE THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN DAILY RECORDS FOR EACH COATING CONSISTING OF (a) COATING TYPE, (b) VOC CONTENT AS APPLIED IN GRAMS PER LITER (g/l) OF MATERIALS USED FOR LOW-SOLIDS COATINGS, (c) VOC CONTENT AS APPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING.

[RULE 3004 (a) (4)]

**Emissions And Requirements:**

2. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

VOC: RULE 1113, SEE APPENDIX B FOR EMISSION LIMITS  
VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS



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## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

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### RULE 219 EQUIPMENT

**Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, HAND WIPING OPERATIONS.

**Emissions And Requirements:**

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS



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**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

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**RULE 219 EQUIPMENT**

**Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, AIR CONDITIONING UNITS

**Emissions And Requirements:**

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

REFRIGERANT:           RULE 1415  
REFRIGERANT:           40CFR 82 SUBART F



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### SECTION E: ADMINISTRATIVE CONDITIONS

The operating conditions in this section shall apply to all permitted equipment at this facility unless superseded by condition(s) listed elsewhere in this permit.

1. The permit shall remain effective unless this permit is suspended, revoked, modified, reissued, denied, or it is expired for nonpayment of permit processing or annual operating fees. [201, 203, 209, 301]
  - a. The permit must be renewed annually by paying annual operating fees, and the permit shall expire if annual operating fees are not paid pursuant to requirements of Rule 301(d). [301(d)]
  - b. The Permit to Construct listed in Section H shall expire one year from the Permit to Construct issuance date, unless a Permit to Construct extension has been granted by the Executive Officer or unless the equipment has been constructed and the operator has notified the Executive Officer prior to the operation of the equipment, in which case the Permit to Construct serves as a temporary Permit to Operate. [202, 205]
  - c. The Title V permit shall expire as specified under Section K of the Title V permit. The permit expiration date of the Title V facility permit does not supercede the requirements of Rule 205. [205, 3004]
2. The operator shall maintain all equipment in such a manner that ensures proper operation of the equipment. [204]
3. This permit does not authorize the emissions of air contaminants in excess of those allowed by Division 26 of the Health and Safety Code of the State of California or the Rules and Regulations of the AQMD. This permit cannot be considered as permission to violate existing laws, ordinances, regulations, or statutes of other governmental agencies. [204]
4. The operator shall not use equipment identified in this facility permit as being connected to air pollution control equipment unless they are so vented to the identified air pollution control equipment which is in full use and which has been included in this permit. [204]



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### SECTION E: ADMINISTRATIVE CONDITIONS

5. The operator shall not use any equipment having air pollution control device(s) incorporated within the equipment unless the air pollution control device is in full operation. [204]
6. The operator shall maintain records to demonstrate compliance with rules or permit conditions that limit equipment operating parameters, or the type or quantity of material processed. These records shall be made available to AQMD personnel upon request and be maintained for at least five years. [204]
7. The operator shall maintain and operate all equipment to ensure compliance with all emission limits as specified in this facility permit. Compliance with emission limits shall be determined according to the following specifications, unless otherwise specified by AQMD rules or permit conditions: [204]
  - a. For internal combustion engines and gas turbines, measured concentrations shall be corrected to 15 percent stack-gas oxygen content on a dry basis and be averaged over a period of 15 consecutive minutes; [1110.2, 1134]
  - b. For other combustion devices, measured concentrations shall be corrected to 3 percent stack-gas oxygen content on a dry basis and be averaged over a period of 15 consecutive minutes; [1146, 1146.1, 204]
  - c. For non-combustion sources, compliance with emission limits shall be determined and averaged over a period of 60 minutes; [204]
  - d. For the purpose of determining compliance with Rule 407, carbon monoxide (CO) shall be measured on a dry basis and be averaged over 15 consecutive minutes, and sulfur compounds which would exist as liquid or gas at standard conditions shall be calculated as sulfur dioxide (SO<sub>2</sub>) and be averaged over 15 consecutive minutes; [407]
  - e. For the purpose of determining compliance with Rule 409, combustion contaminant emission measurements shall be corrected to 12 percent of carbon dioxide (CO<sub>2</sub>) at standard conditions and averaged over a minimum of 15 consecutive minutes. [409]



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### SECTION E: ADMINISTRATIVE CONDITIONS

- f. For the purpose of determining compliance with Rule 475, combustion contaminant emission measurements shall be corrected to 3 percent of oxygen (O<sub>2</sub>) at standard conditions and averaged over 15 consecutive minutes or any other averaging time specified by the Executive Officer. [475]
8. The operator shall, when a source test is required by AQMD, provide a source test protocol to AQMD no later than 60 days before the proposed test date. The test shall not commence until the protocol is approved by AQMD. The test protocol shall contain the following information: [204, 304]
  - a. Brief description of the equipment tested.
  - b. Brief process description, including maximum and normal operating temperatures, pressures, throughput, etc.
  - c. Operating conditions under which the test will be performed.
  - d. Method of measuring operating parameters, such as fuel rate and process weight. Process schematic diagram showing the ports and sampling locations, including the dimensions of the ducts and stacks at the sampling locations, and distances of flow disturbances, (e.g. elbows, tees, fans, dampers) from the sampling locations (upstream and downstream).
  - e. Brief description of sampling and analytical methods used to measure each pollutant, temperature, flow rates, and moisture.
  - f. Description of calibration and quality assurance procedures.
  - g. Determination that the testing laboratory qualifies as an "independent testing laboratory" under Rule 304 (conflict of interest).
9. The operator shall submit a report no later than 60 days after conducting a source test, unless otherwise required by AQMD rules or equipment-specific conditions. The report shall contain the following information: [204]
  - a. The results of the source test.



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## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

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### SECTION E: ADMINISTRATIVE CONDITIONS

- b. Brief description of the equipment tested.
  - c. Operating conditions under which the test was performed.
  - d. Method of measuring operating parameters, such as fuel rate and process weight. Process schematic diagram showing the ports and sampling locations, including the dimensions of the ducts and stacks at the sampling locations, and distances of flow disturbances, (e.g. elbows, tees, fans, dampers) from the sampling locations (upstream and downstream).
  - e. Field and laboratory data forms, strip charts and analyses.
  - f. Calculations for volumetric flow rates, emission rates, control efficiency, and overall control efficiency.
10. The operator shall, when a source test is required, provide and maintain facilities for sampling and testing. These facilities shall comply with the requirements of AQMD Source Test Method 1.1 and 1.2. [217]
  11. Whenever required to submit a written report, notification or other submittal to the Executive Officer, AQMD, or the District, the operator shall mail or deliver the material to: Deputy Executive Officer, Engineering and Compliance, AQMD, 21865 E. Copley Drive, Diamond Bar, CA 91765-4182. [204]



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

**SECTION F: RECLAIM MONITORING AND SOURCE TESTING REQUIREMENTS**

NOT APPLICABLE



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**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

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**SECTION G: RECORDKEEPING AND REPORTING REQUIREMENTS FOR  
RECLAIM SOURCES**

NOT APPLICABLE



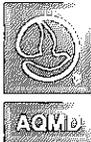
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**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

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**SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE**

NONE



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### SECTION I: PLANS AND SCHEDULES

This section lists all plans approved by AQMD for the purposes of meeting the requirements of applicable AQMD rules specified below. The operator shall comply with all conditions specified in the approval of these plans.

Documents pertaining to the plan applications listed below are available for public review at AQMD Headquarters. Any changes to plan applications will require permit modification in accordance with Title V permit revision procedures.

#### List of approved plans:

Application	Rule
343725	1150.1
407361	431.1
531556	3003

NOTE: This section does not list compliance schedules pursuant to the requirements of Regulation XXX - Title V Permits; Rule 3004(a)(10)(C). For equipment subject to a variance, order for abatement, or alternative operating condition granted pursuant to Rule 518.2, equipment specific conditions are added to the equipment in Section D or H of the permit.



# South Coast Air Quality Management District

21865 E. Copley Drive, Diamond Bar, CA 91765-4182  
(909) 396-2000 • www.aqmd.gov



April 2, 2003

Pete Soriano  
BKK Landfill  
2210 South Azusa Avenue  
West Covina, California 91792

**RE: Rule 431.1 Alternative Monitoring Plan for the BKK Landfill  
Facility ID: 55449 Application No. 407361**

Dear Mr. Soriano;

On August 15, 1997, an Alternative Monitoring Plan (AMP) was submitted to demonstrate compliance with South Coast Air Quality Management District (AQMD) Rule 431.1 at the Chiquita Canyon Landfill. A subsequent revision to the AMP was submitted on August 28, 1997 and an updated data package was received on November 30, 2001. The AMP has been approved by AQMD, CARB and EPA provided that the following conditions are met:

- 1) The colorimetric tubes (TUBES) for analyzing H<sub>2</sub>S as TS shall be used in accordance with manufacturer's instructions. Testing with TUBES shall be conducted by personnel properly trained in its operation. The TUBES shall be used within their shelf life.
- 2) Based on the concentration of Total Sulfur (TS) in the landfill gas (as measured by a TUBE), tiered sampling and reporting requirements as outlined in the following table shall be implemented.

**FLARE LAO-LA1:**

ACTION LEVEL	BKK PROPOSED MONITORING	AQMD MODIFIED TIERS	SAMPLING REQUIREMENT
Tier I	TS ≤ 100 ppm	TS < 100 ppm	- Quarterly using Method 307-91 - Monthly using TUBE
Tier II	100 ppm < TS ≤ 120 ppm	100 ppm ≤ TS < 120 ppm	- Monthly using Method 307-91 - Weekly using TUBE
Tier III	120 < TS ≤ 135 ppm	120 ≤ TS < 140 ppm	- Weekly using Method 307-91 - Daily using TUBE
Tier IV		TS ≥ 140 ppm	- Potential RULE 431.1 Violation - Inform AQMD immediately following R430 Breakdown Provisions - Daily using Method 307-91

*Cleaning the air that we breathe...*

**FLARE LBO:**

ACTION LEVEL	BKK PROPOSED MONITORING	AQMD MODIFIED TIERS	SAMPLING REQUIREMENT
Tier I	TS ≤ 100 ppm	TS < 100 ppm	- Quarterly using Method 307-91 - Monthly using TUBE
Tier II	100 ppm < TS ≤ 120 ppm	100 ppm ≤ TS < 120 ppm	- Monthly using Method 307-91 - Weekly using TUBE
Tier III	120 < TS ≤ 135 ppm	120 ≤ TS < 136 ppm	- Weekly using Method 307-91 - Daily using TUBE
Tier IV		TS ≥ 136 ppm	- Potential RULE 431.1 Violation - Inform AQMD immediately following R430 Breakdown Provisions - Daily using Method 307-91

**FLARE LB1:**

ACTION LEVEL	BKK PROPOSED MONITORING	AQMD MODIFIED TIERS	SAMPLING REQUIREMENT
Tier I	TS ≤ 100 ppm	TS < 100 ppm	- Quarterly using Method 307-91 - Monthly using TUBE
Tier II	100 ppm < TS ≤ 120 ppm	100 ppm ≤ TS < 120 ppm	- Monthly using Method 307-91 - Weekly using TUBE
Tier III	120 < TS ≤ 135 ppm	120 ≤ TS < 133 ppm	- Weekly using Method 307-91 - Daily using TUBE
Tier IV		33	- Potential RULE 431.1 Violation - Inform AQMD immediately following R430 Breakdown Provisions - Daily using Method 307-91

Since this AMP is approved, fuel gas determination and reporting for sulfur content, as described in Rule 431.1(g)(10) and outlined in your approved Rule 1150.1 Compliance Plan, no longer serves as a surrogate method of compliance with Rule 431.1.

If you have any further questions, please contact me at (909) 396-2684.

Sincerely,

Charles Tupac  
Air Quality Analysis and Compliance Supervisor  
Toxics and Waste Management Team

CT:sc

cc: David Jones, Compliance  
File



# South Coast Air Quality Management District



21865 E. Copley Drive, Diamond Bar, CA 91765-4182  
(909) 396-2000 • <http://www.aqmd.gov>

June 20, 2000

BKK CORPORATION, LANDFILL DIVISION GNRL  
2210 S AZUSA AVE  
WEST COVINA, CA 91792

Attention: PETER SORLANO

## RULE 1150.1 COMPLIANCE PLAN

Reference is made to your Application for a Rule 1150.1 Compliance Plan for the following landfill.

Facility ID:	55449	Sector:	SM
Application No:	343725	Phone No:	(626) 965-0911
Common Name:	BKK (Class I)		
Location Address:	2210 S AZUSA AVE		
City:	WEST COVINA	, CA	91792

South Coast Air Quality Management District (AQMD) has reviewed your application and approved the following alternatives to Rule 1150.1 requirements for your landfill. Rule 1150.1 Compliance Plans may be submitted by each owner or operator responsible for that section of the rule directly under their control, or by the owner or operator responsible for the entire landfill. Compliance under the alternative provision is achieved if only one owner or operator with responsibility submits a compliance plan for the applicable section of the rule. Only one alternative to each rule requirement shall be allowed for multiple Compliance Plans issued to one landfill. The approved alternative shall be written into each Compliance Plan. The AQMD reserves the right to deny any or all of these alternatives if it is determined that the alternative(s) allow emissions from the landfill that would not have occurred if the owner or operator was complying with the rule requirements.

Where no Rule 1150.1 alternatives are specified below, compliance with provisions of Rule 1150.1 is required. You are further advised that other governmental agencies may require approval for the operation of this landfill and it is the responsibility of the

applicant to obtain approval from each agency. This compliance plan will remain in force until either a new plan is filed and approved or the applicant is notified by the Executive Officer of revisions to this plan. The AQMD shall not be responsible or liable for any losses resulting from measures required or taken pursuant to the requirements of this approved Rule 1150.1 Compliance Plan.

If you have any questions regarding this matter, please phone Gaurang Rawal, Air Quality Engineer at (909) 396-2543.

Sincerely,



Larry M. Bowen  
Senior Manager

cc: Rafael Reynosa  
Air Quality Inspector

Issue Number: 1 -a

(Adopted April 5, 1985)(Amended April 10, 1998)  
(Amended March 17, 2000)

**RULE 1150.1. CONTROL OF GASEOUS EMISSIONS FROM  
MUNICIPAL SOLID WASTE LANDFILLS**

**TABLE OF CONTENTS**

- (a) Purpose
  - (b) Applicability
  - (c) Definitions
  - (d) Active Landfill Design and Operation Requirements
  - (e) Active Landfill Sampling and Monitoring Requirements
  - (f) Active Landfill Recordkeeping and Reporting Requirements
  - (g) Active Landfill Compliance Schedule
  - (h) Inactive Landfill Requirements
  - (i) Alternatives
  - (j) Test Methods
  - (k) Exemptions
  - (l) Loss of Exemption
- Attachment A
- 1.0 Subsurface Refuse Boundary Sampling Probes
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- Attachment B
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**The reference numbers in the left hand margin of the rule refer to sections of  
40 CFR, Part 60, Subpart WWW (NSPS)**

**RULE 1150.1. CONTROL OF GASEOUS EMISSIONS FROM MUNICIPAL  
SOLID WASTE LANDFILLS**

(a) Purpose

The rule is intended to limit Municipal Solid Waste (MSW) landfill emissions to prevent public nuisance and possible detriment to public health caused by exposure to such emissions.

(b) Applicability

This rule applies to each active and inactive MSW landfill.

(c) Definitions

Terms used but not defined in this rule have the meaning given them in 40 CFR, Part 60, Section 60.751 (Definitions):

- (1) ADMINISTRATOR means the Executive Officer of the South Coast Air Quality Management District (District).
- (2) ACTIVE LANDFILL means an MSW landfill that has received waste on or after November 8, 1987.
- (3) BACKGROUND means the local ambient concentration of total organic compounds (TOC) measured as methane determined by holding the instrument probe approximately 5 to 6 feet above the landfill surface.
- (4) CLOSED LANDFILL means a disposal facility that has ceased accepting waste and was closed in accordance with all applicable federal, state and local statutes, regulations, and ordinances in effect at the time of closure.
- (5) INACTIVE LANDFILL means an MSW landfill where solid waste had been disposed of before November 8, 1987 and no more subsequent solid waste disposal activity has been conducted within the disposal facility.
- (6) MSW LANDFILL means an entire disposal facility in a contiguous geographical space where solid waste is placed in or on land. An MSW landfill may be either active or inactive.
- (7) OPERATOR means the person:
  - (A) Operating the MSW landfill, or
  - (B) Operating the MSW landfill gas collection or control system.
- (8) OWNER means the person holding Title to the property.

- (9) PERIMETER means the outer boundary of the entire waste disposal property.
- (10) PROFESSIONAL ENGINEER means an engineer holding a valid certificate issued by the State of California Board of Registration for Professional Engineers and Land Surveyors or a state offering reciprocity with California.
- (11) TOXIC AIR CONTAMINANT (TAC) means an air contaminant which has been identified as a hazardous air pollutant pursuant to Section 7412 of Title 42 of the United States Code; or has been identified as a TAC by the Air Resources Board pursuant to Health and Safety Code Section 39655 through 39662, or which may cause or contribute to an increase in mortality or an increase in serious illness, or potential hazard to human health.

(d) Active Landfill Design and Operation Requirements

The MSW landfill owner or operator shall comply with the provisions of paragraphs (d)(1) through (d)(11):

(1) If a valid Permit to Construct or Permit to Operate for the collection and control system that meets the requirements of subparagraphs (d)(1)(A) through (d)(1)(C) has not been issued by the District by the adoption date of this rule, submit a site-specific collection and control system design plan. The design plan shall be prepared by a Professional Engineer and sent to the Executive Officer with applications for Permits to Construct or Permits to Operate no later than one year after the adoption of this rule. The Executive Officer shall review the collection and control system design and either approve it, disapprove it, or request that additional information be submitted.

752(b)(2)(i)  
752(b)(2)(i)(D)

(A) The collection and control system shall be designed to handle the maximum expected gas flow rate from the entire area of the landfill that requires control, to minimize migration of subsurface gas to comply with paragraph (d)(4), and to collect gas at an extraction rate to comply with paragraphs (d)(5) and (d)(6). For the purposes of calculating the maximum expected gas generation flow rate from the landfill, one of the equations in 40 CFR, Part 60, Section 60.755(a)(1) shall be used. Another method may be used

752(b)(2)(ii)(A)(1), (3), (4)  
755(a)(1)  
758(b)(1)(i)

to determine the maximum gas generation flow rate, if the method has been approved by the Executive Officer.

- (B) If a valid Permit to Construct or Permit to Operate has not been issued by the District for the collection and control system, the collection and control system design plan shall either conform with specifications for active collection systems in 40 CFR, Part 60, Section 60.759 or include a demonstration to the Executive Officer's satisfaction of the sufficiency of the alternative provisions describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. Alternatives to this rule shall be submitted as specified in subdivision (i).

752(b)(2)(i)(C)  
756(e)

- (C) The design plan shall provide for the control of collected MSW landfill emissions through the use of a collection and control system meeting the applicable requirements in clauses (d)(1)(C)(i) and (d)(1)(C)(ii):

752(b)(2)(iii)

- (i) Route all the collected gas to a control system designed and operated to either reduce NMOC by at least 98 percent by weight or reduce the outlet NMOC concentration to less than 20 parts per million by volume (ppmv), dry basis as hexane at 3 percent oxygen. The required reduction efficiency or ppmv shall be established by an initial source test, required under 40 CFR, Part 60, Section 60.8 and annually thereafter using the test methods specified in paragraph (j)(1). The annual source test shall be conducted no later than 45 days after the anniversary date of the initial source test.

**ALTERNATIVE: THE FOLLOWING FREQUENCY  
SHALL BE USED FOR SOURCE TESTING  
IDENTICAL FLARES LISTED ON ONE  
PERMIT TO OPERATE WHERE  
IDENTICAL MEANS, BUT IS NOT LIMITED  
TO:**

**MAKE AND MODEL, BURNERS, OPERATIONAL  
SETTINGS, MAINTENANCE AND FUELS.**

**SINGLE BACKUP FLARE- AFTER EVERY 4000 HOURS OF OPERATION.**

**MULTIPLE BACKUP FLARES - ONE FLARE AFTER EVERY 4000 HOURS OF CUMULATIVE BACKUP OPERATION FOR ALL FLARES LISTED ON THE PERMIT TO OPERATE. ALTERNATE TESTING OF THE FLARES SUCH THAT EACH FLARE IS TESTED.**

**NON-BACKUP FLARES: AT LEAST ONE FLARE EVERY YEAR AND THEN ALTERNATE ALL OTHERS SUCH THAT EACH IS SOURCE TESTED AT LEAST ONCE EVERY THREE YEARS.**

- (I) If a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone. Where the landfill gas is the primary fuel for the boiler or process heater, introduction of the landfill gas stream into the flame zone is not required.
  - (II) The control device shall be operated within the operating parameter ranges established during the initial or most recent compliant source test. The operating parameters to be monitored are specified under paragraph (e)(6).
- (ii) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of clause (d)(1)(C)(i).
- (2) Install and operate the collection and control system no later than 18 months after the submittal of the design plan.
- 752(b)(2)(ii)
- (3) If the District has not issued prior written approval for subsurface refuse boundary sampling probes, design and install subsurface refuse boundary

sampling probes as specified in Section 1.1, Attachment A, to determine whether landfill gas migration exists. Installation of the refuse boundary probes shall be no later than 18 months after the submittal of the collection and control design plan as specified in paragraph (d)(1).

**ALTERNATIVE: THE SUBSURFACE REFUSE BOUNDARY PROBE LOCATIONS AS REFERENCED IN THE TOPOGRAPHIC MAP DATED 5/25/00 OR THE MOST RECENT UPDATE, WITH SHEET TITLE "BKK LANDFILL SITE AQMD RULE 1150.1 PROBES AND GRIDS" ARE APPROVED. ALL FUTURE DESIGNS AND INSTALLATIONS NOT MEETING THE RULE REQUIREMENTS, SHALL BE SUBMITTED FOR AQMD PRE-CONSTRUCTION APPROVAL WITH A COMPLIANCE PLAN APPLICATION.**

- (4) Operate the collection system to prevent the concentration of TOC measured as methane from exceeding five percent by volume in the subsurface refuse boundary sampling probes constructed for the purposes of detecting lateral migration of landfill gas away from the waste mass, as determined from collected samples.
- (5) Operate the collection system to prevent the concentration of TOC measured as methane from exceeding 50 ppmv as determined by integrated samples taken on numbered 50,000 square foot landfill grids.
- (6) Operate the collection system to prevent the concentration of TOC measured as methane from exceeding 500 ppmv above background as determined by instantaneous monitoring at any location on the landfill, except at the outlet of any control device.
- (7) Operate the control or treatment system at all times when the collected gas is routed to the system. In the event the collection, treatment or control system is inoperable, the gas conveying system shall be shut down and all valves in the collection, treatment and control system contributing to venting of the gas to the atmosphere shall be closed no later than one hour after such breakdown or no later than one hour after the time the owner or operator knew or reasonably should have known of its occurrence.
- (8) Operate the collection, treatment and control system until all the exemption criteria under subdivision (k) has been met and the reports specified in subparagraph (f)(2)(D) have been submitted to the Executive Officer.

753(d)

753(e)

752(b)(2)(V)

- (9) Design, install and operate a wind speed and direction monitoring system with a continuous recorder of the requirements in subparagraphs (d)(9)(A) and (d)(9)(B), at a site which is representative of the wind speed and direction in the areas being sampled. The wind velocity shall be recorded throughout the sampling period. The wind direction transmitter shall be oriented to true north using a compass. The monitor shall be installed according to the criteria set forth in 40 CFR, Part 50.
- (A) For wind speed use a 3 cup assembly, with a range of 0 to 50 miles per hour, with a threshold of 0.75 mile per hour or less.
- (B) For wind direction use a vane, with a range of 0 to 540 degrees azimuth, with a threshold of plus-minus 2 degrees.
- (10) Comply with the requirements of Section 21140 – Final Cover, of California Code of Regulations Title 27, Subchapter 5 – Closure and Post-Closure Maintenance, upon closure of a MSW landfill unit, incorporated herein as Attachment B.
- (11) Comply with the requirement of Section 20200 – State Water Resources Conservation Board (SWRCB) Applicability and Classification Criteria of California Code of Regulations Title 27, Article 2 – SWRCB, Waste Classification and Management, with respect to the disposal of liquids and semi-solid waste at Class III landfills, incorporated herein as Attachment C.
- (e) Active Landfill Sampling and Monitoring Requirements
- The MSW landfill owner or operator shall comply with the provisions of paragraphs (e)(1) through (e)(6), after installation of the landfill gas control system:
- (1) Monitor and collect samples for analysis as specified in Section 1.0, Attachment A, to determine the concentrations of TOC and TAC each month from the subsurface refuse boundary sampling probes, to assure continued compliance. Any measurement of 5 percent TOC by volume or greater shall be recorded as an exceedance and the actions specified in subparagraphs (e)(1)(A) through (e)(1)(C) shall be taken.
- ALTERNATIVE: QUARTERLY PROVIDED THAT THE PERIMETER GAS COLLECTION SYSTEM IS IN FULL OPERATION.**

- (A) The probe shall be identified and the location recorded as specified in Section 1.6, Attachment A.
  - (B) Adjustments to the vacuum of adjacent wells to increase the gas collection in the vicinity of the probe with the exceedance shall be made and the probe resampled no later than 10 calendar days after detecting the exceedance.
  - (C) If the resampling of the probe shows a second exceedance, additional corrective action shall be taken and the probe shall be resampled again no later than 10 calendar days after the second exceedance. If the resampling shows a third exceedance, it is a violation unless the owner or operator determines that a new or replacement gas collection well is needed. The owner or operator must install and operate the new or replacement well no later than 45 days after detecting the third exceedance.
- (2) Collect monthly integrated samples for analysis as specified in Section 2.0, Attachment A, to determine the concentrations of TOC and TAC from the landfill surface, to assure continued compliance. Any reading of 50 ppmv or greater shall be recorded as an exceedance and the actions specified in subparagraphs (e)(2)(A) through (e)(2)(C) shall be taken.

**ALTERNATIVE: QUARTERLY**

- (A) The grid shall be identified and the location recorded as specified in Section 2.8, Attachment A.
- (B) Cover maintenance or adjustments to the vacuum of adjacent wells to increase the gas collection in the vicinity of the grid with the exceedance shall be made and the grid resampled no later than 10 calendar days after detecting the exceedance. If measurable precipitation occurs within the 10 calendar days, all resampling and analysis shall comply with Section 2.2.2, Attachment A.
- (C) If the resampling of the grid shows a second exceedance, additional corrective action shall be taken and the grid shall be resampled again no later than 10 calendar days after the second exceedance. If the resampling shows a third exceedance, it is a violation unless the owner or operator determines that a new or replacement gas collection well is needed. The owner or operator must install and operate the new or replacement well no later than 45 days after detecting the third exceedance.

- (3) Monitor instantaneously as specified in Section 3.0, Attachment A, to determine the concentration of TOC each calendar quarter, to assure continued compliance. Any reading of 500 ppmv TOC or greater shall be recorded as an exceedance and the actions specified in subparagraphs (e)(3)(A) through (e)(3)(C) shall be taken. Any closed landfill that has no monitored exceedances of the 500 ppmv standard in three consecutive quarterly monitoring periods may monitor annually. Any reading of 500 ppmv TOC or more above background detected during the annual monitoring or compliance inspections shall result in a return to quarterly monitoring for that landfill.

755(c)  
756(f)

**ALTERNATIVE: SEMI-ANNUALLY FOR THE HAZARDOUS WASTE LANDFILL UNIT THAT HAS A CAP WHICH IS IN ACCORDANCE WITH THE CLOSURE DESIGN APPROVED BY THE CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY, DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC), FORMERLY THE DEPARTMENT OF HEALTH SERVICES, TOXIC SUBSTANCES CONTROL PROGRAM AS DOCUMENTED IN A LETTER DATED JUNE 12, 1991.**

- (A) The location of each monitored exceedance shall be marked on the landfill or identified by using a global positioning system and the location recorded as specified in Section 3.4, Attachment A.
- (B) Cover maintenance or adjustments to the vacuum of adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be remonitored no later than 10 calendar days after detecting the exceedance.
- (C) If the remonitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be remonitored again no later than 10 days after the second exceedance. If the remonitoring shows a third exceedance, it is a violation unless the owner or operator determines that a new or replacement gas collection well is needed. The owner or operator must install and operate the new or replacement well no later than 45 days after detecting the third exceedance.
- (4) Collect a monthly landfill gas sample for analysis as specified in Section 4.0, Attachment A, to determine the concentrations of TOC and TAC from

the main gas collection header line entering the gas treatment and/or gas control systems.

**ALTERNATIVE: QUARTERLY**

- (5) Collect monthly ambient air samples for analysis as specified in Section 5.0, Attachment A, to determine the concentrations of TOC and TAC from the landfill property boundary.
- (6) Monitor the collection and control system equipment specified under subparagraphs (e)(6)(A) and (e)(6)(B) in order to comply with subparagraph (d)(1)(C).

756(b)

(A) For an enclosed combustor install, calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment:

- (i) A temperature monitoring device equipped with a continuous recorder and having an accuracy of plus-minus 1 percent of the temperature being measured expressed in degrees Celsius or Fahrenheit. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity greater than 44 megawatts.
- (ii) At least one gas flow rate measuring device that shall record the flow to the control device(s) at least every 15 minutes.

756(d)

(B) For a device other than an enclosed combustor, demonstrate compliance with subparagraph (d)(1)(C) by providing information satisfactory to the Executive Officer describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. Alternatives to this rule shall be submitted as specified in subdivision (i). The Executive Officer may specify additional appropriate monitoring procedures.

(f) Active Landfill Recordkeeping and Reporting Requirements

The MSW landfill owner or operator shall keep all records up-to-date, readily accessible and maintained for at least a period of 5 years and made available to

758(a)

District staff upon request. Records older than 2 years may be maintained off-site, if they are retrievable no later than 4 hours after request .

(1) The records required in subparagraphs (f)(1)(A) through (f)(1)(H) shall be maintained at the facility.

758(b)

(A) For the life of the control equipment as measured during the initial source test or compliance determination:

(i) The control device vendor specifications.

(ii) The maximum expected gas generation flow rate as calculated in subparagraph (d)(1)(A).

(iii) When seeking to demonstrate compliance with subparagraph (d)(1)(C) through the use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity greater than 44 megawatts:

(I) The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the source test.

**ALTERNATIVE: FOR FLARE(S),  
CONTINUOUSLY RECORD THE  
INSTANTANEOUS COMBUSTION  
TEMPERATURE.**

**FOR BOILERS AND TURBINES THIS  
REQUIREMENT IS NOT APPLICABLE.**

(II) The reduction of NMOC determined as specified in clause (d)(1)(C)(i) achieved by the control device.

(iv) When seeking to demonstrate compliance with subclause (d)(1)(C)(i)(I) through the use of a boiler or process heater of any size: a description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the source testing.

(B) The data required to be recorded under Section 1.6, Attachment A, for subsurface refuse boundary sampling probes and all remedial actions taken for exceedances of the 5 percent TOC standard required in paragraph (d)(4).

(C) The data required to be recorded under Section 2.8, Attachment A, for integrated samples and all remedial actions taken for

exceedances of the 50 ppmv TOC standard required in paragraph (d)(5).

758(e)

(D) The data required to be recorded under Section 3.4, Attachment A, for instantaneous monitoring and all remedial actions taken for exceedances of the 500 ppmv TOC standard required in paragraph (d)(6).

(E) The data required to be recorded under Section 4.5, Attachment A, for landfill gas samples collected from the main gas collection header line entering the gas treatment and/or gas control systems.

(F) The data required to be recorded under Section 5.7, Attachment A, from ambient air collected at the landfill property boundary.

757(f)(3)

(G) A description and the duration of all periods when the collection, treatment or control device was not operating for a period exceeding one hour and the length of time the system was not operating.

758(c)

(H) Continuous records of the equipment operating parameters specified to be monitored under paragraph (e)(6) as well as records for periods of operation during which the parameter boundaries established during the most recent source test are exceeded.

(i) The following constitute exceedances that shall be recorded:

(I) For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28° C (82° F) below the average combustion temperature during the most recent source test at which compliance with subparagraph (d)(1)(C) was determined.

(II) For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under clause (f)(1)(A)(iv).

(ii) Records of the indication of flow to the control device specified under paragraph (e)(6)(A)(ii).

(iii) Each owner or operator who uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with subparagraph (d)(1)(C) shall keep records of all periods of operation of the boiler or process heater. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other State, local, Tribal, or Federal regulatory requirements.)

(2) The reports required in subparagraphs (f)(2)(A) through (f)(2)(D) shall be submitted to the Executive Officer (Either paper copy or electronic formats are acceptable).

(A) The initial source test report no later than 180 days after start-up and each succeeding complete annual source test report no later than 45 days after the anniversary date of the initial source test, for all control systems required in subparagraph (d)(1)(C).

(B) A report no later than 45 days after the last day of each calendar quarter with the information required in clauses (f)(2)(B)(i) and (f)(2)(B)(ii).

(i) All exceedances of the emission standards required in paragraphs (d)(4), (d)(5) and (d)(6) in the format required under Sections 1.6, 2.8 and 3.4, Attachment A. All exceedance resampling/remonitoring and each corrective action required under paragraphs (e)(1), (e)(2) and (e)(3). If there are no exceedances, submit a letter stating there were no exceedances for that quarter.

(ii) All TAC analyses required in paragraphs (e)(1) through (e)(5).

(C) A closure report to the Executive Officer no later than 30 days after waste acceptance cessation. The Executive Officer may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR, Part 258, Section 258.60 or the applicable federal, state and local statutes, regulations, and ordinances in effect at the time of closure. If a closure report has been submitted to the Executive Officer, no additional wastes shall be placed into

757(d)

the landfill without filing a notification of modification as described under 40 CFR, Part 60, Section 60.7(a)(4).

- (D) A decommissioning report to the Executive Officer 30 days prior to well capping, removal or cessation of operation of the collection, treatment or control equipment. The decommissioning report shall contain all of the items as specified in clauses (f)(2)(D)(i) through (f)(2)(D)(iii):

757(e)

- (i) A copy of the closure report submitted in accordance with subparagraph (f)(2)(C).
- (ii) A copy of the initial source test report demonstrating that the collection and control system has been installed a minimum of 15 years.
- (iii) All records needed to verify the landfill meets the exemption criteria under subdivision (k).

- (g) Active Landfill Compliance Schedule

The MSW landfill owner or operator shall comply with the active landfill requirements of this rule or submit alternatives to this rule as specified in subdivision (i) no later than 90 days after April 10, 1998. Rule 1150.1 Compliance Plans previously submitted to the District shall remain in effect during the 90 days after April 10, 1998, or until the owner or operator has received an approved alternative Rule 1150.1 Compliance Plan submitted as specified in subdivision (i).

- (h) Inactive Landfill Requirements

The MSW landfill owner or operator shall comply with either the applicable requirements in paragraphs (h)(1) and (h)(2) or submit alternatives to this rule as specified in subdivision (i).

- (1) Inactive landfills that have a landfill gas collection system shall meet all of the active landfill requirements. For those inactive landfills without a gas collection system and determined to need one, meet all of the active landfill requirements, except the collection and control system design plan and applications for permits shall be submitted no later than one year after notification by the Executive Officer.
- (2) Inactive landfills without a gas collection system:

- (A) Upon discovery of TOC measured as methane exceeding 500 ppmv at any location on the landfill surface, apply mitigation measures such as compaction, additional cover, and/or watering to reduce the emissions to less than 500 ppmv. The procedure used for measurement of TOC shall meet the requirements of Section 3.0, Attachment A.
- (B) Submit the following Data and/or meet the required action in paragraph (h)(1):
  - (i) At any time after the adoption of this rule, but not later than 30 days after the receipt of a request, submit to the Executive Officer a screening questionnaire pursuant to California Air Resources Board Health and Safety Code (H & S) 41805.5.
  - (ii) No later than 90 days after the date of a second request, submit to the Executive Officer a solid waste air quality assessment test (SWAT) report pursuant to H & S 41805.5, to determine whether or not a landfill gas collection and control system and/or a subsurface refuse boundary probe sampling system shall be required to be installed.
  - (iii) If additional time is needed to provide the information required in clauses (h)(2)(B)(i) and (h)(2)(B)(ii), a written request for an extension may be submitted in writing to the Executive Officer, indicating the amount of time that is needed to obtain such information. Such a request for an extension may be submitted to the Executive Officer no later than 30 days after the receipt of the Executive Officer's requests as specified in clauses (h)(2)(B)(i) and (h)(2)(B)(ii).
  - (iv) Upon notification by the Executive Officer that a landfill gas collection and control system and/or a subsurface refuse boundary probe sampling system shall be required, comply with paragraph (h)(1).

(i) Alternatives:

Because of the many site-specific factors involved in the design and operation of landfill gas systems, alternatives to the requirements, test methods, procedures, 752(b)(2)(i)(B)

compliance measures, monitoring, recordkeeping or reporting provisions of this rule may be necessary. All alternatives to the requirements of this rule shall be submitted to the Executive Officer in a Rule 1150.1 Compliance Plan. The Executive Officer shall review the Rule 1150.1 Compliance Plan and either approve it, disapprove it, or request that additional information be submitted. The Executive Officer shall deny the plan unless he determines that it will provide equivalent levels of emission control and enforceability, as would compliance with the requirements of this rule.

## (j) Test Methods

## (1) Methods of Analysis

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(A) Either U.S. EPA Reference Method 25 or U.S. EPA Reference Method 18, 40 CFR, Part 60, Appendix A shall be used to determine the efficiency of the control system in reducing NMOC by at least 98 percent by weight. If using Method 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The equation in subparagraph (j)(1)(B) shall be used to calculate efficiency.

(B) U.S. EPA Reference Method 25, 40 CFR, Part 60, Appendix A shall be used to determine the efficiency of the control system in reducing the outlet NMOC concentration to less than 20 ppmv, dry basis as hexane at 3 percent oxygen. Until, but not after District Method 25.3 has met equivalency as specified in paragraph (j)(2), U.S. EPA Reference Method 18, 40 CFR, Part 60, Appendix A may be used for this source test. If using Method 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:

$$\text{Control Efficiency} = (\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}}) / (\text{NMOC}_{\text{in}})$$

where,

$\text{NMOC}_{\text{in}}$  = mass of NMOC entering control device

$\text{NMOC}_{\text{out}}$  = mass of NMOC exiting control device

## (2) Equivalent Test Methods

Any other method demonstrated to be equivalent and approved in writing by the Executive Officers of the District, the California Air Resources Board (CARB), and the Regional Administrator of the United States Environmental Protection Agency (U.S. EPA), Region IX, or their designees, may be used to determine compliance with this rule.

(k) Exemptions

An MSW landfill may be temporarily exempt from all or any portion of the requirements of this rule if the owner or operator can demonstrate to the Executive Officer that the MSW landfill emissions meet the requirements of paragraphs (k)(1) through (k)(4). Temporary exemption may be independently determined by the Executive Officer, if the MSW landfill emissions meet the requirements of paragraphs (k)(1) through (k)(4). MSW landfills issued temporary exemption letters by the Executive Officer shall remain exempt, subject to periodic review, provided:

- (1) The MSW landfill complies with the requirements of paragraphs (d)(4), (d)(5) and (d)(6).
- (2) The MSW landfill emits less than 55 tons per year of NMOC as specified in 40 CFR, Part 60, Section 60.752(b) or, for a closed landfill, as specified in 40 CFR, Part 60, Section 60.752(b)(2)(v)(C).
- (3) The MSW landfill constitutes an insignificant health risk. In making this determination the Executive Officer shall consider the listed factors in subparagraphs (k)(3)(A) through (k)(3)(G). Where not specified, in evaluating the cancer risks and hazard indexes, the Executive Officer shall be guided by the definitions in District Rule 1401 - New Source Review of Carcinogenic Air Contaminants, and Rule 1402 - Control of Toxic Air Contaminants From Existing Sources.
  - (A) The proximity to, and any adverse impacts on, residences, schools, hospitals or other locations or structures which have children, or elderly or sick persons.
  - (B) The emission migration beyond the landfill property boundary.
  - (C) The complaint history.
  - (D) The age and closure date.
  - (E) The amount and type of waste deposited.
  - (F) That the emissions of carcinogenic air contaminants, specified in Table 1, Attachment A, from the landfill will not result in a

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maximum individual cancer risk greater than one in one million ( $1 \times 10^{-6}$ ) at any receptor location.

- (G) That the emissions of TAC, specified in Table 1, Attachment A, from the landfill will not result in a total acute or chronic Hazard Index of greater than 1.

- (4) The MSW landfill is in compliance with District Nuisance Rule 402.

Such temporary exemption shall be reviewed periodically by the Executive Officer, to consider the land use surrounding the landfill and gaseous emissions, and the impact on the public. Depending upon the results of the review, the Executive Officer may extend or terminate the exemption.

- (I) Loss of Exemption

If an MSW landfill should have its temporary exemption terminated, the owner or operator shall comply with the active landfill requirements of this rule.

ATTACHMENT A

1.0 SUBSURFACE REFUSE BOUNDARY SAMPLING PROBES

Paragraph (d)(4) and (e)(1) Requirements of Rule 1150.1

1.1 Subsurface Probe Design and Installation

Landfills which are subject to Rule 1150.1 must install and maintain a subsurface refuse boundary probe sampling system of adequate design to determine if gas migration exists for the ultimate purpose of preventing surface emissions. The California Integrated Waste Management Board also requires the installation of refuse boundary probes for purposes of detecting and ultimately preventing subsurface migration of landfill gas past the permitted property boundary of the landfill/disposal site as well as the prevention of the accumulation of landfill gas in on-site structures. It is the District's intent that the subsurface refuse boundary probes required by paragraph (d)(3) of Rule 1150.1 be designed and installed in such a manner as to comply with the requirements of the California Integrated Waste Management Board (whenever possible) and Sections 1.1.1 through 1.1.4.

1.1.1 The probes shall be installed within the landfill property line and outside the refuse disposal area.

1.1.2 Wherever accessible, the probes shall be located no further than 100 feet from the refuse boundary.

**ALTERNATIVE: WHEREVER ACCESSIBLE AND THE PROBES ARE GREATER THAN 100 FEET FROM THE REFUSE, MONITOR INSTANTANEOUSLY FROM THE REFUSE BOUNDARY TO THE PROBE, USING THE GRID METHOD EVERY QUARTER AND WHEN PROBES EXCEED 2% TOC.**

1.1.3 The spacing between probes shall be based on the adjacent land use no further than 1320 feet (1/4 mile) from the refuse boundary and shall be determined as follows:

LAND USE	SPACING
Residential/Commercial	100 feet
Public Access	500 feet
Undeveloped Open Space, (No Public Access)	650 feet
Landfill with Liners	1000 feet

1.1.4 Each probe shall be capped, sealed, have a sampling valve and be of multiple-depth design for which the depth shall be determined based on the depth of refuse no further than 500 feet from the probe as follows:

- |              |  |
|--------------|--|
| First Depth  | 10 feet below surface.   |
| Second Depth | 25% of refuse depth or 25 feet below surface, whichever is deeper. |
| Third Depth  | 50% of refuse depth or 50 feet below surface, whichever is deeper. |
| Fourth Depth | 75% of refuse depth or 75 feet below surface, whichever is deeper. |

Second, third, or fourth depth probes may be deleted if the required depth of such probe is deeper than the depth of the refuse.

1.2 Number of Samples

All refuse boundary gas probes at each depth shall be monitored monthly for TOC measured as methane using a portable flame ionization detector (FID) meeting the requirements of Section 3.2 and with a tube connected to the probe sampling valve. In addition, samples shall be taken as specified in Section 1.2.1 or 1.2.2 to determine the concentration of both TOC and TAC. The Executive Officer may require additional probes to be sampled upon written request.

1.2.1 If the TOC concentration measured with the FID does not exceed 5% by volume in any of the probes, collect one bag sample from one probe with the highest concentration, or

1.2.2 If the TOC concentration measured with the FID for any of the probes exceeds 5% by volume, collect one bag sample per probe from the probes with the highest concentrations above 5% by volume, from at least five probes.

1.3 Subsurface Refuse Boundary Probe Sampling Procedure

1.3.1 Prior to collecting gas samples, evacuate the probe (the probes must be sealed during evacuation) until the TOC concentration remains constant for at least 30 seconds.

1.3.2 The constant TOC concentration shall be measured using an FID that meets the requirements in Section 3.2.

**ALTERNATIVE: PORTABLE ANALYZERS ON AN APPROVED LIST OF EQUIPMENT MAINTAINED BY THE AQMD MAY BE**

**USED AS ALTERNATIVES FOR THE SAMPLER/INSTRUMENT  
REQUIREMENTS OF THIS RULE.**

- 1.3.3 Collect approximately a 10-liter gas sample in a Tedlar (Dupont trade name for polyvinyl) bag or equivalent container over a continuous ten-minute period using the evacuated container sampling procedure described in Section 7.1.1 of EPA Method 18 or direct pump sampling procedure described in Section 7.1.2 of EPA Method 18. The container shall be LIGHT-SEALED.

**ALTERNATIVE: SUMMA-CANNISTERS MAY BE  
SUBSTITUTED FOR THE 10-LITER TEDLAR BAG**

1.4 Subsurface Refuse Boundary Probe Analytical Procedures

All samples collected shall be analyzed no later than 72 hours after collection for TOC using U.S. EPA Method 25, 40 CFR, Part 60, Appendix A analysis or a portable FID that meets the requirements in Section 3.2 and for the TAC specified in Table 1 and upon written request, Table II, using U.S. EPA Compendium Method TO-14.

1.5 Chain of Custody (Required for samples sent to the lab)

A custody sheet shall accompany the bag samples. Each time a bag changes hands, it shall be logged on the custody sheet with the time of custody transfer recorded. Laboratory personnel shall record the condition of the sample (full, three-fourths full, one-half full, one-fourth full, or empty). An example of a custody sheet is shown in Figure 4.

1.6 Recording the Results

1.6.1 Record the volume concentration of TOC measured as methane for each individually identified refuse boundary probe (at each depth) and the volume concentration of TAC for selected probes on a quality control sheet as shown in Figure 3. Include a topographic map drawn to scale with the location of both the refuse boundary probes and the gas collection system clearly marked and identified.

1.6.2 Maintain and submit the results as specified in subdivision (f) of Rule 1150.1.

**2.0 INTEGRATED LANDFILL SURFACE SAMPLING**

**Paragraph (d)(5) and (e)(2) Requirements of Rule 1150.1**

2.1 Number of Samples

The number of samples collected will depend on the area of the landfill surface. The entire landfill disposal area shall be divided into individually identified 50,000 square foot grids. One monthly sample shall be collected from each grid for analysis. Any area that the Executive Officer deems inaccessible or dangerous for a technician to enter may be excluded from the sampling grids monitored by the landfill owner or operator. To exclude an area from monitoring, the landfill owner or operator shall file a written request with the Executive Officer. Such a request shall include an explanation of the requested exclusion and photographs of the area. The Executive Officer shall notify the landfill owner or operator in writing of the decision. Any exclusion granted shall apply only to the monitoring requirement. The 50 ppmv limit specified in paragraph (d)(5) of Rule 1150.1 applies to all areas.

2.2 Integrated Surface Sampling Conditions

2.2.1. The average wind speed during this sampling procedure shall be five miles per hour or less. Surface sampling shall be terminated when the average wind speed exceeds five miles per hour or the instantaneous wind speed exceeds ten miles per hour. Average wind speed is determined on a 15-minute average.

2.2.2. Surface sampling shall be conducted when the landfill is dry. The landfill is considered dry when there has been no measurable precipitation for the preceding 72 hours prior to sampling. Most major newspapers report the amount of precipitation that has fallen in a 24-hour period throughout the Southern California area. Select the nearest reporting station that represents the landfill location or provide for measurable precipitation collection at the MSW landfill wind monitoring station.

2.3 Integrated Surface Sampler Equipment Description

An integrated surface sampler is a portable self-contained unit with its own internal power source. The integrated sampler consists of a stainless steel collection probe, a rotameter, a pump, and a 10-liter Tedlar bag enclosed in a LIGHT-SEALED CONTAINER to prevent photochemical reactions from occurring during sampling and transportation. The physical layout of the sampler is shown in Figure 1.

An alternate integrated surface sampler may be used, provided that the landfill owner or operator can show an equivalency with the sampler specifications in Section 2.4 and shown in Figure 1. All alternatives shall be submitted as specified in subdivision (i) of Rule 1150.1.

2.4 Integrated Surface Sampler Equipment Specifications

- 2.4.1 Power: Batteries or any other power source.
- 2.4.2 Pump: The diaphragm shall be made of non-lubricated Viton (Dupont trade name for co-polymer of hexafluoropropylene and vinylidene fluoride) rubber.
- 2.4.3 Bag: One 10-liter Tedlar bag with a valve. The Tedlar bag shall be contained in a LIGHT-SEALED CONTAINER. The valve shall be leak free and constructed of aluminum, stainless steel, or non-reactive plastic with a Viton or Buna-N (butadiene acrylonitrile co-polymer) o-ring seal.
- 2.4.4 Rotameter: The rotameter shall be made of borosilicate glass or other non-reactive material and have a flow range of approximately 0-to-1 liter per minute. The scale shall be in milliliters or an equivalent unit. The graduations shall be spaced to facilitate accurate flow readings.
- 2.4.5 Air Flow Control Orifice: Needle valve in the rotameter.
- 2.4.6 Funnel: 316 stainless steel.
- 2.4.7 Fittings, Tubing and Connectors: 316 stainless steel or Teflon.

2.5 Integrated Surface Sampling Procedure

- 2.5.1 An integrated surface sampler as described in Section 2.4 shall be used to collect a surface sample approximately 8-to-10 liters from each grid.
- 2.5.2 During sampling, the probe shall be placed 0-to-3 inches above the landfill surface.
- 2.5.3 The sampler shall be set at a flow rate of approximately 333 cubic centimeters per minute
- 2.5.4 Walk through a course of approximately 2,600 linear feet over a continuous 25-minute period. Figure 2 shows a walk pattern for the 50,000 square foot grid.

**ALTERNATIVE: ROUTE MONITORING IS APPROVED AS AN ALTERNATIVE FOR THE INTEGRATED SURFACE SAMPLING PROCEDURE WITH THE FOLLOWING CONDITIONS:**

A. A TOPOGRAPHICAL MAP, SHOWING ALL ROUTES WITHIN EACH 50,000 SQUARE FOOT GRID AND THE COLLECTION SYSTEM LAYOUT, SHALL BE SUBMITTED TO THE AQMD WITHIN 30 DAYS OF APPROVAL OF THIS PLAN. THE TOPOGRAPHIC MAP DATED 5/25/00 OR THE MOST RECENT UPDATE, WITH SHEET TITLES "BKK CLASS I LANDFILL AQMD RULE 1150.1 GRIDS AND ROUTES" HAS BEEN APPROVED.

B. EACH GRID SHALL HAVE FOUR DIFFERENT ROUTES BETWEEN 100 AND 250 FEET LONG. ESTABLISH A SAMPLING SEQUENCE FOR THE FOUR ROUTES WITHIN EACH GRID. PERFORM SAMPLING OVER ONE ROUTE EACH FREQUENCY SPECIFIED UNDER (E)(2) UNTIL ALL THE GRIDS ON THE LANDFILL SURFACE HAVE BEEN SAMPLED. FOLLOW THE SAMPLING SEQUENCE UNTIL ALL FOUR ROUTES WITHIN EACH GRID HAVE BEEN COMPLETED. AFTER THE FOUR ROUTES HAVE BEEN SAMPLED, SUBSEQUENT SAMPLING OF THE GRID SHALL FOLLOW THE SAME ROUTE SEQUENCE EXCEPT WHEN MEETING FOLLOW-UP COMPLIANCE FOR (E)(2) EXCEEDANCES.

C. EACH ROUTE SHALL BE WALKED, AT A MINIMUM, OVER A CONSECUTIVE 2 ½-MINUTE PERIOD.

D. IF THE INTEGRATED MONITORING RESULTS IN A READING EQUAL TO OR GREATER THAN 35 PPM WITHIN A GIVEN GRID, THEN INSTANTANEOUS MONITORING SHALL BE CONDUCTED TO FIND THE AREAS OF HIGH EMISSIONS. REPAIRS SHALL BE MADE WHERE EMISSIONS ARE FOUND TO BE GREATER THAN 500 PPM.

2.6 Integrated Surface Sample Analytical Procedures

All samples collected shall be analyzed no later than 72 hours after collection for TOC using U.S. EPA Method 25, 40 CFR, Part 60, Appendix A analysis or a portable FID that meets the requirements in Section 3.2. In addition, the samples specified in Section 2.6.1 or 2.6.2 must be analyzed no later than 72 hours after

collection for the TAC specified in Table 1 and upon written request, Table II, using U.S. EPA Compendium Method TO-14.

2.6.1 Ten percent of all samples which have a concentration of TOC greater than 50 ppmv as methane, or

2.6.2 Two samples if all samples are 50 ppmv or less of TOC or two samples if there are less than 20 samples above 50 ppmv.

The Executive Officer may require more samples to be tested for TAC if he determines there is a potential nuisance or public health problem.

2.7 Chain of Custody (Required for samples sent to the lab)

A custody sheet shall accompany the bag samples. Each time a bag changes hands, it shall be logged on the custody sheet with the time of custody transfer recorded. Laboratory personnel shall record the condition of the sample (full, three-fourths full, one-half full, one-fourth full, or empty). An example of a custody sheet is shown in Figure 4.

2.8 Recording the Results

2.8.1 Record the volume concentration of both TOC measured as methane for each grid and the volume concentration for the required TAC on a quality control sheet as shown in Figure 3. Include a topographic map drawn to scale with the location of the grids and the gas collection system clearly marked and identified.

2.8.2 Record the wind speed during the sampling period using the wind speed and direction monitoring system required in paragraph (d)(9) of Rule 1150.1.

2.8.3 Maintain and submit the results as specified in subdivision (f) of Rule 1150.1.

3.0 **INSTANTANEOUS LANDFILL SURFACE MONITORING**  
Subparagraph (d)(6) and (e)(3) Requirements of Rule 1150.1

3.1 Monitoring Area

The entire landfill disposal area shall be monitored once each calendar quarter. Any area of the landfill that the Executive Officer deems as inaccessible or dangerous for a technician to enter may be excluded from the area to be monitored by the landfill owner or operator. To exclude an area from monitoring, the landfill owner or operator shall file a petition with the Executive Officer. Such a

request shall include an explanation of why the area should be excluded and photographs of the area. Any excluded area granted shall only apply to the monitoring requirement. The 500 ppmv limit specified in paragraph (d)(6) of Rule 1150.1 applies to all areas.

**ALTERNATIVE: SHADED PORTIONS OF GRIDS, AS REFERENCED IN THE TOPOGRAPHIC MAPS DATED 5/25/00 OR THE MOST RECENT UPDATE, WITH SHEET TITLES "BKK CLASS I LANDFILL AQMD RULE 1150.1 GRIDS AND ROUTES" AND "BKK CLASS I LANDFILL AQMD RULE 1150.1 GAS WELLS AND GRIDS", SHALL BE MONITORED AS FOLLOWS: INCLUDE BENCHES, DRAINAGE CULVERTS, SLOPES LESS THAN 30 DEGREES AND FOR THOSE PORTIONS OF SLOPES GREATER THAN 30 DEGREES EXTEND THE MONITORING DEVICE PROBE OVER THE SLOPE AS FAR AS PRACTICAL TO COVER AS MUCH OF THE SLOPE AS POSSIBLE. LARGE CLUMPS OF PAMPAS GRASS AND DENSE PERENNIAL VEGETATION (NOT ANNUAL WEEDS) MAY BE EXCLUDED FROM MONITORING. THE TOPOGRAPHIC MAPS SHALL BE DRAWN TO SCALE CLEARLY IDENTIFYING TOPOGRAPHICAL FEATURES OF THE LANDFILL WITH CONTOUR LINES. THE LOCATION OF ALL MONITORING GRIDS AND THE GAS COLLECTION SYSTEM SHALL BE CLEARLY MARKED AND IDENTIFIED. THE SUBMITTED TOPOGRAPHICAL MAPS WILL BE FILED IN THE APPLICATION FOLDER AND USED FOR COMPLIANCE. SMALLER 11" BY 17" TOPOGRAPHICAL MAPS ARE ATTACHED TO THIS PLAN FOR FIELD REFERENCE. VACUUM READINGS FROM ALL GAS EXTRACTION WELLS LOCATED ON GRIDS WITH SHADED PORTIONS, SHALL BE RECORDED MONTHLY AND INCLUDED IN THE QUARTERLY REPORT.**

**IN ADDITION, MONITORING IS NOT REQUIRED FOR THE FOLLOWING LANDFILL SURFACES: PORTIONS OF SLOPES 30 DEGREES AND GREATER (EXCEPT FOR THE EXCLUSION OF THE MONITORING DEVICE PROBE ABOVE), AND PAVED SURFACES EXCEPT FOR CRACKS.**

3.2 Equipment Description and Specifications

A portable FID shall be used to instantaneously measure the concentration of TOC measured as methane at any location on the landfill. The FID shall meet the specifications listed in Sections 3.2.1 through 3.2.4 and shall be kept in good operating condition.

3.2.1 The portable analyzer shall meet the instrument specifications provided in Section 3 of U.S. EPA Method 21, except that:

3.2.1.1 "Methane" shall replace all references to VOC.

3.2.1.2 A response time of 15 seconds or shorter shall be used instead of 30 seconds.

3.2.1.3 A precision of 3% or better shall be used instead of 10%.

In addition the instrument shall meet the specifications in Sections 3.2.1.4 through 3.2.1.6.

3.2.1.4 A minimum detectable limit of 5 ppmv (or lower).

3.2.1.5 A flame-out indicator, audible and visual.

3.2.1.6 Operate at an ambient temperature of 0 - 50° C.

3.2.2 The calibration gas shall be methane, diluted to a nominal concentration of 10,000 ppmv in air for subsurface refuse boundary probe monitoring and sample analysis to comply with paragraph (e)(1) of Rule 1150.1, 50 ppmv in air for integrated sample analyses to comply with paragraph (e)(2) of Rule 1150.1 and 500 ppmv in air for instantaneous monitoring to comply with paragraph (e)(3) of Rule 1150.1.

3.2.3 To meet the performance evaluation requirements in Section 3.1.3 of U.S. EPA Method 21, the instrument evaluation procedures of Section 4.4 of U.S. EPA Method 21 shall be used.

3.2.4 The calibration procedures provided in Section 4.2 of U.S. EPA Method 21 shall be followed at the beginning of each day before commencing a surface monitoring survey.

### 3.3 Monitoring Procedures

3.3.1 The owner or operator shall monitor the landfill disposal area for TOC measured as methane using the described portable equipment.

3.3.2 The sampling probe shall be placed at a distance of 0-3 inches above any location of the landfill to take the readings.

3.3.3 At a minimum, an individually identified 50,000 square foot grid shall be used and a walk pattern as illustrated in Figure 2 shall be implemented

including areas where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover.

**3.4 Recording the Results**

3.4.1 Record the location and concentration of TOC measured as methane for any instantaneous reading of 500 ppmv or greater on a topographic map of the landfill, drawn to scale with the location of both the grids and the gas collection system clearly marked and identified.

3.4.2 Maintain and submit the results as specified in subdivision (f) of Rule 1150.1.

**4.0 LANDFILL GAS SAMPLE FROM GAS COLLECTION SYSTEM**  
**Subparagraph (e)(4) Requirement of Rule 1150.1**

**4.1 Number of Samples**

Collect one monthly sample of landfill gas for analysis from the main gas collection header line entering the gas treatment and/or gas control system(s).

**4.2 Sampling Procedure**

Collect approximately a 10-liter sample in a Tedlar bag or equivalent container over a continuous ten-minute period.

**4.3 Analytical Procedures**

Samples collected shall be analyzed no later than 72 hours after collection for TOC using U.S. EPA Method 25, 40 CFR, Part 60, Appendix A analysis and for the TAC specified in Table 1 and upon written request, Table II, using U.S. EPA Compendium Method TO-14.

**4.4 Chain of Custody (Required for samples sent to the lab)**

A custody sheet shall accompany the bag samples. Each time a bag changes hands, it shall be logged on the custody sheet with the time of custody transfer recorded. Laboratory personnel shall record the condition of the sample (full, three-fourths full, one-half full, one-fourth full, or empty). An example of a custody sheet is shown in Figure 4.

**4.5 Recording the Results**

4.5.1 Record the volume concentration of both TOC measured as methane and the volume concentration for the required TAC on a quality control sheet

as shown in Figure 3. Include a topographic map drawn to scale with the location of the gas collection and control system clearly marked and identified.

4.5.2 Maintain and submit the results as specified in subdivision (f) of Rule 1150.1.

## 5.0 AMBIENT AIR SAMPLES AT THE LANDFILL PROPERTY BOUNDARY

### Subparagraph (e)(5) Requirement of Rule 1150.1

#### 5.1 Number of Samples

Monthly ambient air samples shall be collected for analysis at the landfill property boundary from both an upwind and downwind sampler sited to provide good meteorological exposure to the predominant offshore (drainage land breeze) and onshore (sea breeze) wind flow patterns. The upwind and downwind samples shall be collected simultaneously over two 12 hour periods beginning between 9:00 a.m. and 10:00 a.m., and 9:00 p.m. and 10:00 p.m. on the same day or different days.

**ALTERNATIVE: AMBIENT AIR SAMPLES SHALL BE COLLECTED FOR ANALYSIS AND SITED AT THE MICROWAVE TOWER AND NOGALES END STATION #3 TO PROVIDE GOOD METEOROLOGICAL EXPOSURE TO THE PREDOMINANT OFFSHORE (DRAINAGE LAND BREEZE) AND ONSHORE (SEA BREEZE) WIND FLOW PATTERNS. THE UPWIND AND DOWNWIND SAMPLES SHALL BE COLLECTED SIMULTANEOUSLY OVER TWO 12 HOUR PERIODS BEGINNING BETWEEN 9:00 A.M. AND 10:00 A.M., AND 9:00 P.M. AND 10:00 P.M. ON THE SAME DAY OR DIFFERENT DAYS.**

#### 5.2 Ambient Air Sampling Conditions

Ambient air sampling shall be conducted on days when stable (offshore drainage) and unstable (onshore sea breeze) meteorological conditions are representative for the season. Preferable sampling conditions are characterized by the following meteorological conditions:

5.2.1 Clear cool nights with wind speeds of two miles per hour or less, and

5.2.2 Onshore sea breezes with wind speeds ten miles per hour or less.

No sampling will be conducted if the following adverse meteorological conditions exist:

- 5.2.3 Rain,
- 5.2.4 Average wind speeds greater than 15 miles per hour for any 30-minute period, or
- 5.2.5 Instantaneous wind speeds greater than 25 miles per hour.

Continuously recorded on-site wind speed and direction measurements required in paragraph (d)(9) of Rule 1150.1 will characterize the micrometeorology of the site and serve to verify that the meteorological criteria have been met during sampling.

### 5.3 Ambient Air Sampler Equipment Description

An ambient air sampling unit consists of a 10-liter Tedlar bag, a DC-operated pump, stainless steel capillary tubing to control the sample rate to the bag, a bypass valve to control the sample flow rate (and minimize back pressure on the pump), a Rotameter for flow indication to aid in setting the flow, a 24-hour clock timer to shut off the sampler at the end of the 24-hour sampling period, and associated tubing and connections (made of stainless steel, Teflon, or borosilicate glass to minimize contamination and reactivity). The physical layout of the sampler is shown in Figure 5.

An alternate ambient air sampler may be used, provided that the landfill owner or operator can show an equivalency with the sampler specifications in Section 5.3 and shown in Figure 5. All alternatives shall be submitted as specified in subdivision (i) of Rule 1150.1.

### 5.4 Ambient Air Sampler Equipment Specifications

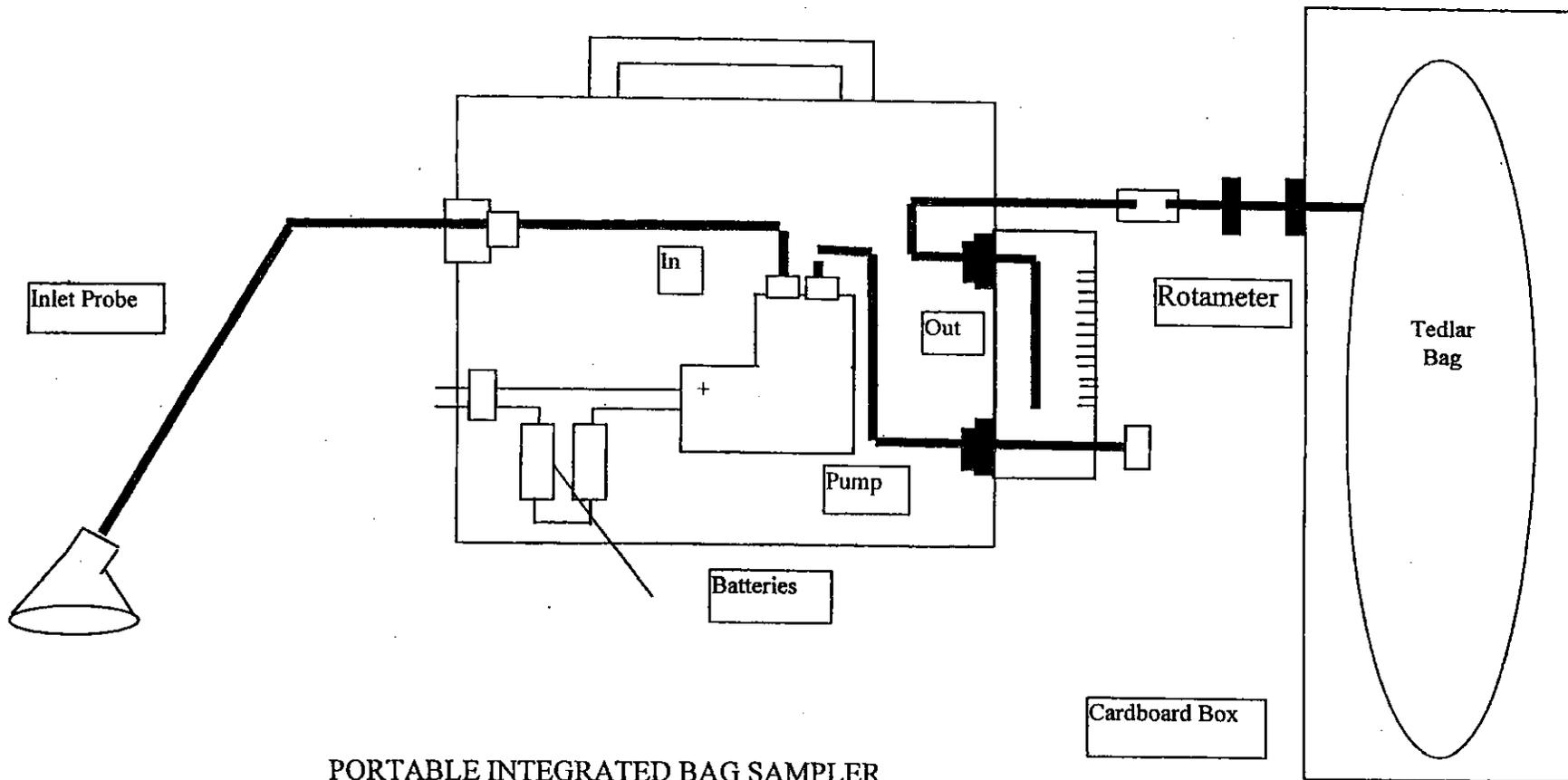
The equipment used when conducting air samples at any landfill property boundary shall meet the following specifications:

- 5.4.1 Power: one 12V DC marine battery. The marine battery provides 12V DC to the pump and the clock.
- 5.4.2 Pump: one 12V DC pump. The diaphragm shall be made of non-lubricated Viton rubber. The maximum pump unloaded flow rate shall be 4.5 liters per minute.
- 5.4.3 Bag: One 10-liter Tedlar bag with a valve. The Tedlar bag shall be enclosed in a LIGHT-SEALED CONTAINER. The valve is a push-pull

type constructed of aluminum and stainless steel, with a Viton or Buna-N (butadiene acrylonitrile co-polymer) o-ring seal.

**ALTERNATIVE: SUMMA-CANNISTERS**

- 5.4.4 Rotameter - made of borosilicate glass and has a flow range of 3-to-50 cubic centimeters per minute. The scale is in millimeters (mm) with major graduations (labeled) every 5 mm and minor graduations every 1 mm.
  - 5.4.5 Air flow control orifice: 316 stainless steel capillary tubing.
  - 5.4.6 Bypass valve.
  - 5.4.7 Fittings, tubing, and connectors -- 315 stainless steel or Teflon.
  - 5.4.8 Clock timer with an accuracy of better than 1%.
- 5.5 Ambient Air Sample Analytical Procedures
- Samples collected must be analyzed no later than 72 hours after collection for TOC using U.S. EPA Method 25, 40 CFR, Part 60, Appendix A analysis or a portable FID that meets the requirements in Section 3.2 and for the TAC specified in Table 1 and upon written request, Table II, using U.S. EPA Compendium Method TO-14.
- 5.6 Chain of Custody (Required for samples sent to the lab)
- A custody sheet shall accompany the bag samples. Each time a bag changes hands, it shall be logged on the custody sheet with the time of custody transfer recorded. Laboratory personnel shall record the condition of the sample (full, three-fourths full, one-half full, one-fourth full, or empty). An example of a custody sheet is shown in Figure 4.
- 5.7 Recording the Results
- 5.7.1 Record the volume concentration of TOC measured as methane and the volume concentration of TAC for each sample on a quality control sheet as shown in Figure 3. Include a topographic map drawn to scale with the location of both the upwind and downwind samplers and the gas collection and control system clearly marked and identified.
  - 5.7.2 Record the wind speed and direction during the 24-hour sampling period using the wind speed and direction monitoring system required in paragraph (d)(9) of Rule 1150.1.
  - 5.7.3 Maintain and submit the results as specified in subdivision (f) of Rule 1150.1.



PORTABLE INTEGRATED BAG SAMPLER  
Physical Layout

Figure 1

Typical Landfill Walk Pattern  
for a 50,000 Square Foot Grid

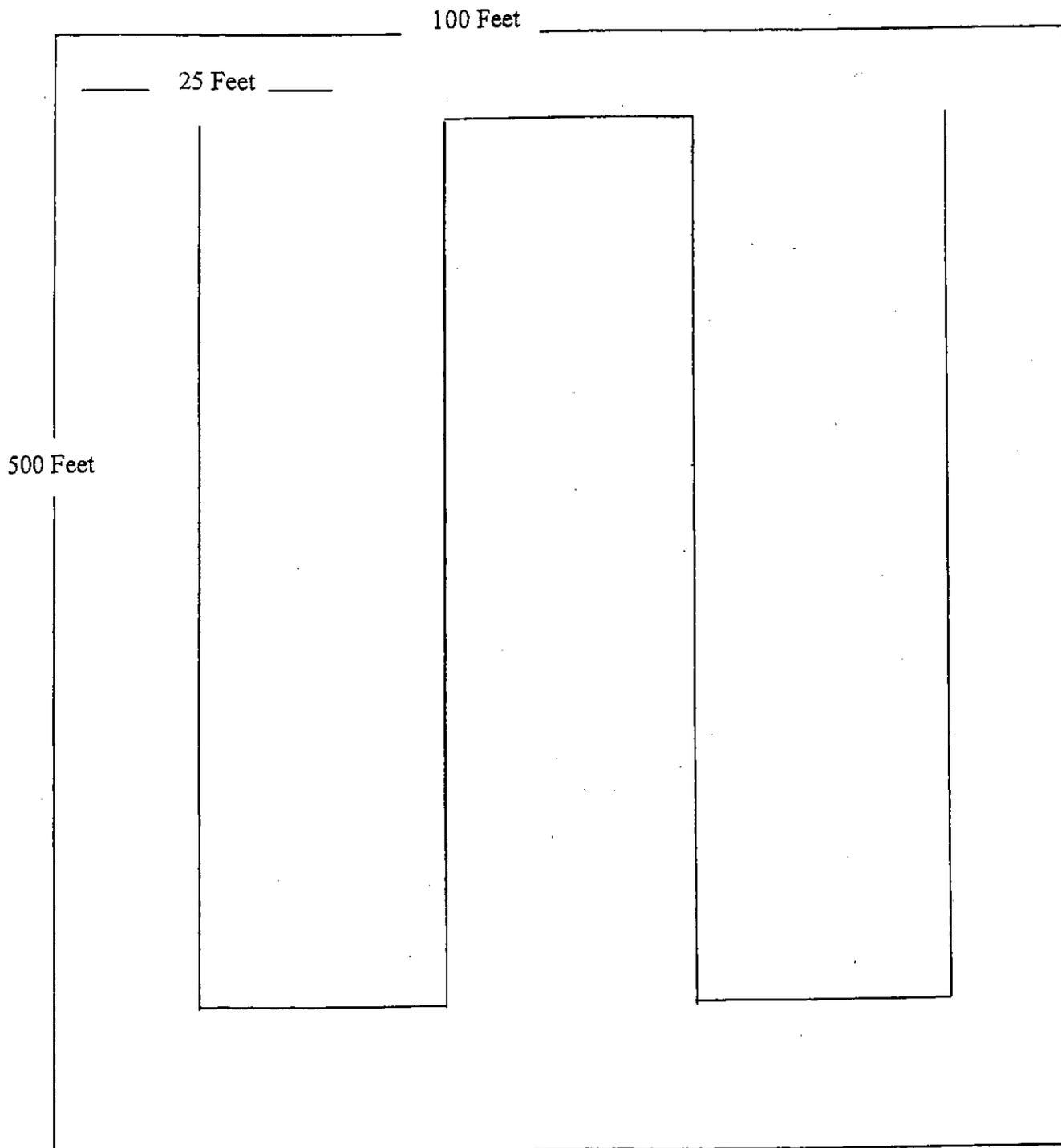


Figure 2



**BAG SAMPLE CUSTODY FORM**

Project \_\_\_\_\_

Date: \_\_\_\_\_

Bag (I.D. #)									
Condition Received in Lab*									

Bags Prepared By: \_\_\_\_\_ Time: \_\_\_\_\_

Date: \_\_\_\_\_

Bags Taken Out By: \_\_\_\_\_ Time: \_\_\_\_\_

Bags Taken to Lab By \_\_\_\_\_

Bags Received In Lab By: \_\_\_\_\_ Time \_\_\_\_\_

\* F = 1/2 full to full, O = Overfull (Bulging), L = 1/4 to 1/2 full,  
E = Less than 1/4 full but contains some sample, N = No sample at all.

**Figure 4**

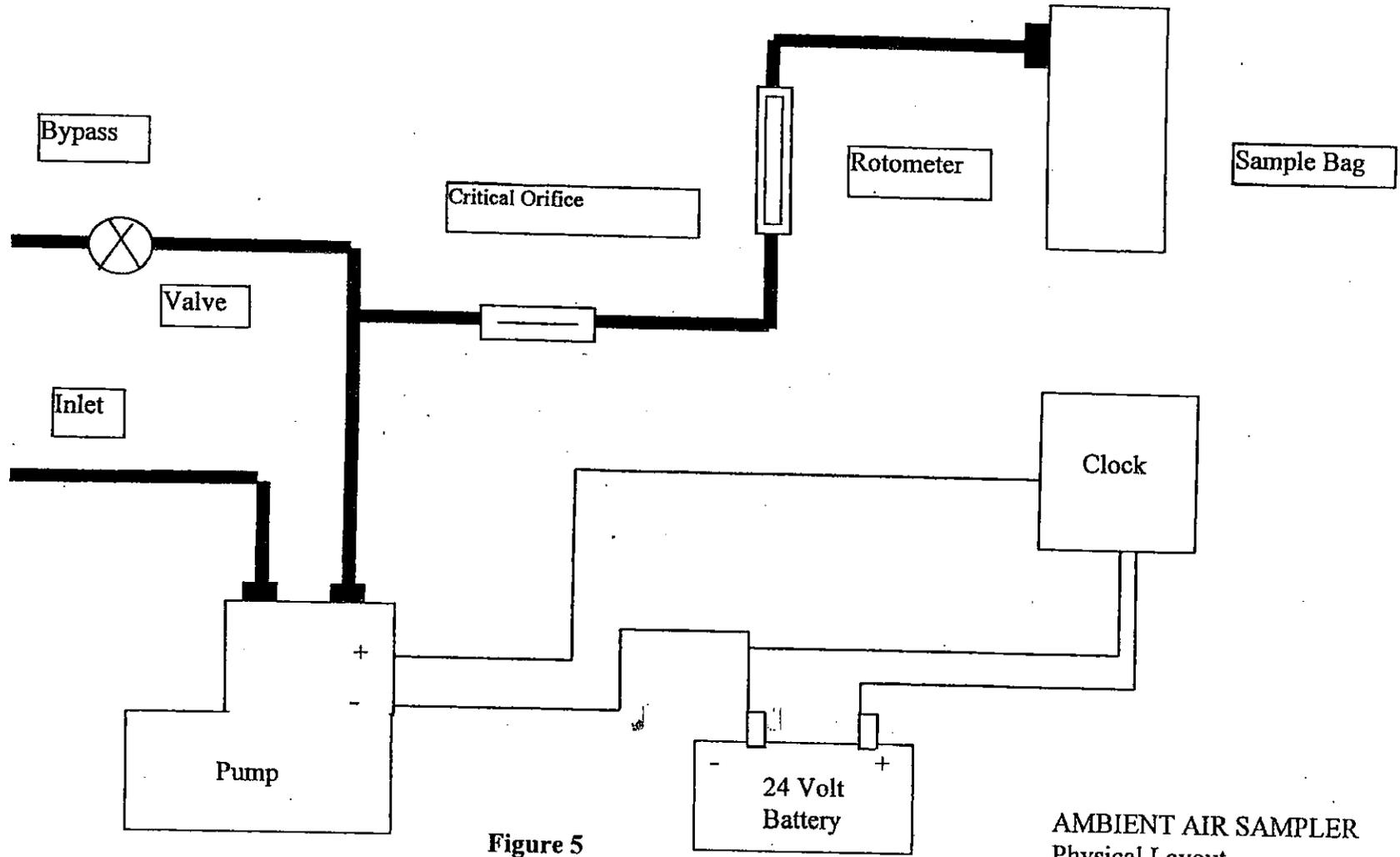


Figure 5

AMBIENT AIR SAMPLER  
Physical Layout

**TABLE 1 - CARCINOGENIC AND TOXIC AIR CONTAMINANTS  
(Core Group)**

**Paragraph (e)(2), Subparagraphs (k)(3)(F) and (k)(3)(G) Requirements of  
Rule 1150.1**

1.	Benzene	$C_6H_6$
2.	Benzyl Chloride	$C_6H_5H_2Cl$
3.	Chlorobenzene	$C_6H_5Cl$
4.	1,2 Dibromoethane (Ethylene Dibromide)	$BrCH_2CH_2Br$
5.	Dichlorobenzene	$C_6H_4Cl_2$
6.	1,1 Dichloroethane (Ethylidene Chloride)	$CH_3CHCl_2$
7.	1,2 Dichloroethane (Ethylene Dichloride)	$ClH_2H_2Cl$
8.	1,1 Dichloroethene (Vinylidene Chloride)	$CH_2 : CCl_2$
9.	Dichloromethane (Methylene Chloride)	$CH_2Cl_2$
10.	Hydrogen Sulfide	$H_2S$
11.	Tetrachloroethylene (Perchloroethylene)	$Cl_2C : CCl_2$
12.	Tetrachloromethane (Carbon Tetrachloride)	$CCl_4$
13.	Toluene	$C_6H_5CH_3$
14.	1,1,1 Trichloroethane (Methyl Chloroform)	$CH_3CCl_3$
15.	Trichloroethylene	$CHCl : CCl_2$
16.	Trichloromethane (Chloroform)	$CHCl_3$
17.	Vinyl Chloride	$CH_2 : CHCl$
18.	Xylene	$C_6H_4(CH_3)_2$

**TABLE 2 - CARCINOGENIC AND TOXIC AIR CONTAMINANTS**  
(Supplemental Group)

Paragraph (e)(2), Subparagraphs (k)(3)(F) and (k)(3)(G) Requirements of  
Rule 1150.1

1.	Acetaldehyde	CH3CHO
2.	Acrolein	CH2CHCHO
3.	Acrylonitrile	H2C : CHCN
4.	Allyl Chloride	H2C : CHCH2Cl
5.	Bromomethane (Methyl Bromide)	CH3Br
6.	Chlorinated Phenols	
7.	Chloroprene	H2C : CHCCl : CH2
8.	Cresol	CH3C6H4OH
9.	Dialkyl Nitrosamines	
10.	1,4 - Dioxane	OCH2CH2OCH2CH2
11.	Epichlorohydrin	CH2OCHCH2Cl
12.	Ethylene Oxide	CH2CH2O
13.	Formaldehyde	HCHO
14.	Hexachlorocyclopentadiene	C5Cl6
15.	Nitrobenzene	C6H5NO2
16.	Phenol	C6H5OH
17.	Phosgene	COCl2
18.	Polychlorinated Dibenzo-P-Dioxin	
19.	Polychlorinated Dibenzo Furan	
20.	Polychlorinated Biphenols	
21.	Polynuclear Aromatic Hydrocarbons	
22.	Propylene Oxide	CH2-CH-CH3
23.	Tetrahydrothiophene	CH2CH2CH2CH2S
24.	Thiophene	CHCHCHCS

## Attachment B

### TITLE 27. Environmental Protection

#### Division 2. Solid Waste

#### Subdivision 1. Consolidated Regulations for Treatment, Storage, Processing or Disposal of Solid

### Chapter 3. Criteria for All Waste Management Units, Facilities, and Disposal Sites

#### Subchapter S. Closure and Post-Closure Maintenance

### Article 2. Closure and Post-Closure Maintenance Standards for Disposal Sites and Landfills

#### §21140. Section CIWMB -- Final Cover. (T14:§17773)

(a) The final cover shall function with minimum maintenance and provide waste containment to protect public health and safety by controlling at a minimum, vectors, fire, odor, litter and landfill gas migration. The final cover shall also be compatible with postclosure land use.

(b) In proposing a final cover design meeting the requirements under §21090, the owner or operator shall assure that the proposal meets the requirements of this section. Alternative final cover designs shall meet the performance requirements of ¶(a) and, for MSWLF units, 40 CFR 258.60(b); shall be approved by the enforcement agency, for aspects of ¶(a).

(c) The EA may require additional thickness, quality, and type of final cover depending on, but not limited to the following:

- (1) a need to control landfill gas emissions and fires;
- (2) the future reuse of the site; and
- (3) provide access to all areas of the site as needed for inspection of monitoring and control facilities, etc.

#### NOTE

Authority cited: Sections 40502 and 43020, Public Resources Code; and Section 66796.22 (d), Government Code. Reference: Sections 43021 and 43103, Public Resources Code; and Section 66796.22(d), Government Code.

#### HISTORY

1. New section filed 6-18-97; operative 7-18-97 (Register 97, No. 25).

**Attachment C**

**TITLE 27. Environmental Protection**

**Division 2. Solid Waste**

**Subdivision 1. Consolidated Regulations for Treatment, Storage, Processing or Disposal of Solid**

**Chapter 3. Criteria for All Waste Management Units, Facilities, and Disposal Sites**

**Subchapter 2. Siting and Design**

**Article 2. SWRCB -- Waste Classification and Management**

**§20200. SWRCB -- Applicability and Classification Criteria. (CIS: §2520)**

(a) **Concept--**This article contains a waste classification system which applies to solid wastes that cannot be discharged directly or indirectly to waters of the state and which therefore must be discharged to waste management units (Units) for treatment, storage, or disposal in accordance with the requirements of this division. Wastes which can be discharged directly or indirectly (*e.g., by percolation*) to waters of the state under effluent or concentration limits that implement applicable water quality control plans (*e.g., municipal or industrial effluent or process wastewater*) are not subject to the SWRCB-promulgated provisions of this division. This waste classification system shall provide the basis for determining which wastes may be discharged at each class of Unit. Waste classifications are based on an assessment of the potential risk of water quality degradation associated with each category of waste.

(1) The waste classifications in this article shall determine where the waste can be discharged unless the waste does not consist of or contain municipal solid waste (MSW) and the discharger establishes to the satisfaction of the RWQCB that a particular waste constituent or combination of constituents presents a lower risk of water quality degradation than indicated by classification according to this article.

(2) Discharges of wastes identified in §20210 or §20220 of this article shall be permitted only at Units which have been approved and classified by the RWQCB in accordance with the criteria established in Article 3 of this subchapter, and for which WDRs have been prescribed or waived pursuant to Article 4, Subchapter 3, Chapter 4 of this subdivision (§21710 et seq.). Table 2.1 (of this article) presents a summary of discharge options for each waste category.

(b) **Dedicated Units/Cells For Certain Wastes--**The following wastes shall be discharged only at dedicated Units [or dedicated landfill cells (*e.g., ash monofill cell*)] which are designed and constructed to contain such wastes:

(1) wastes which cause corrosion or decay, or otherwise reduce or impair the integrity of containment structures;

(2) wastes which, if mixed or commingled with other wastes can produce a violent reaction (including heat, pressure, fire or explosion), can produce toxic byproducts, or can produce any reaction product(s) which:

(A) requires a higher level of containment;

(B) is a restricted waste; or

(C) impairs the integrity of containment structures.

(c) Waste Characterization--Dischargers shall be responsible for accurate characterization of wastes, including determinations of whether or not wastes will be compatible with containment features and other wastes at a Unit under ¶(b), and whether or not wastes are required to be managed as hazardous wastes under Chapter 11 of Division 4.5 of Title 22 of this code.

(d) Management of Liquids at Landfills and Waste Piles--The following requirements apply to discharges of liquids at Class II waste piles and at Class II and Class III landfills, except as otherwise required for MSW landfills by more-stringent state and federal requirements under SWRCB Resolution No. 93-62 section 2908 of Title 23 of this Code (see 40CFR258.28) [Note: see also definitions of "leachate" and "landfill gas condensate" in §20164]:

(1) [Reserved.];

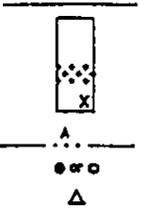
(2) wastes containing free liquids shall not be discharged to a Class II waste pile. Any waste that contains liquid in excess of the moisture-holding capacity of the waste in the Class II landfill, or which contains liquid in excess of the moisture-holding capacity as a result of waste management operations, compaction, or settlement shall only be discharged to a surface impoundment or to another Unit with containment features equivalent to a surface impoundment; and

(3) liquids or semi-solid waste (i.e., waste containing less than 50 percent solids, by weight), other than dewatered sewage or water treatment sludge as described in §20220(c), shall not be discharged to Class III landfills. Exceptions may be granted by the RWQCB if the discharger can demonstrate that such discharge will not exceed the moisture-holding capacity of the landfill, either initially or as a result of waste management operations, compaction, or settlement, so long as such discharge is not otherwise prohibited by applicable state or federal requirements





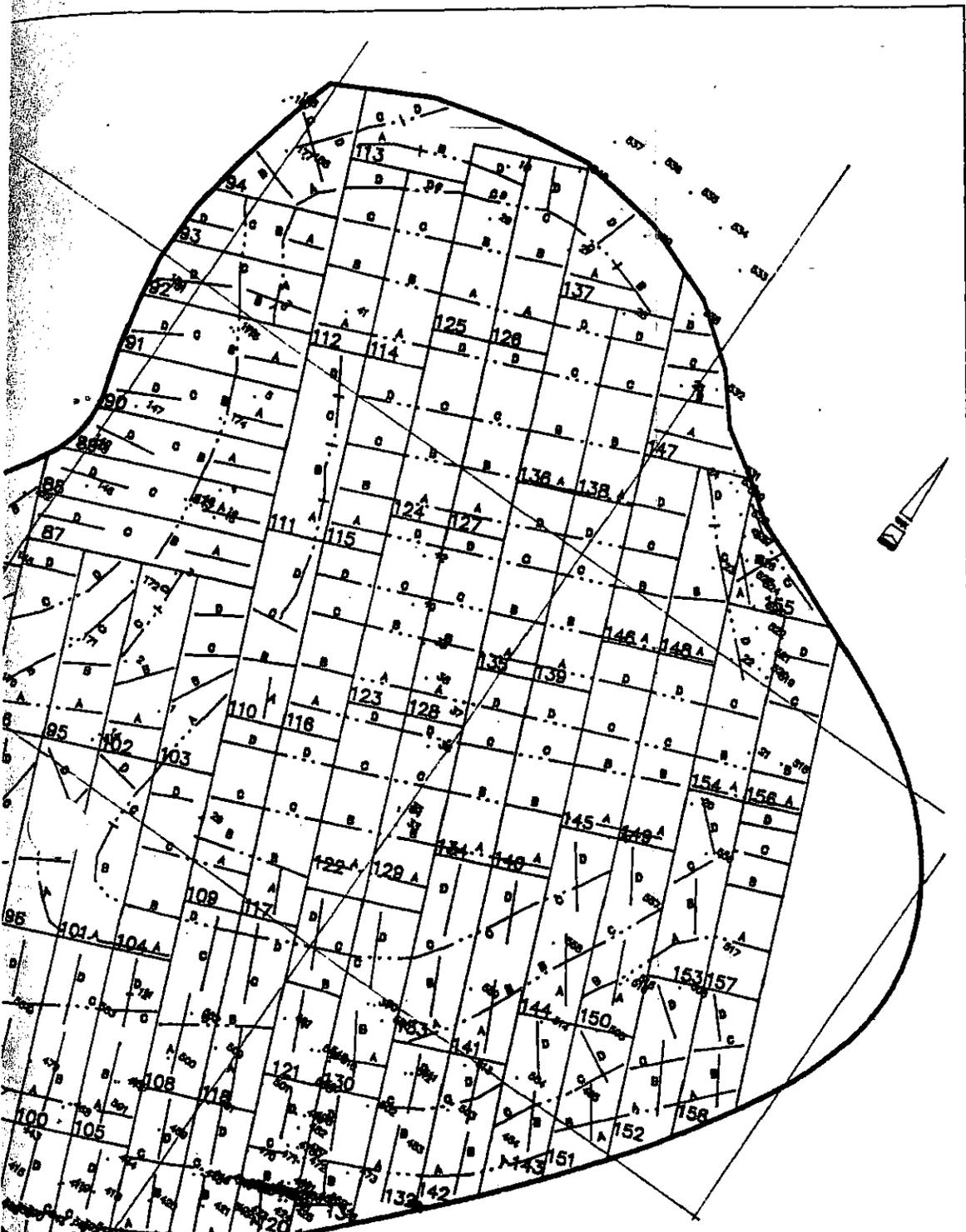
LEGEND



CLASS I LIMITS  
 APPROX. 90,000 Sq Ft GRID  
 (X DENOTES GRID NUMBER)  
 SHADED GRIDS WILL BE  
 MONITORED WHERE POSSIBLE  
 EXCLUDING ANOMALIES  
 ROUTE is A, B, C, or D  
 VERTICAL GAS WELL  
 HORIZONTAL GAS WELL

<b>ENKOR ENVIRONMENTAL SERVICES, INC.</b>	
90K CLASS I LANDFILL (AMD RULE 1160.1) GRIDS AND ROUTES	
DATE: 5/25/00	DRAWN BY: J.A. NTS
PROJECT: 1160.1-1	SCALE: AS SHOWN



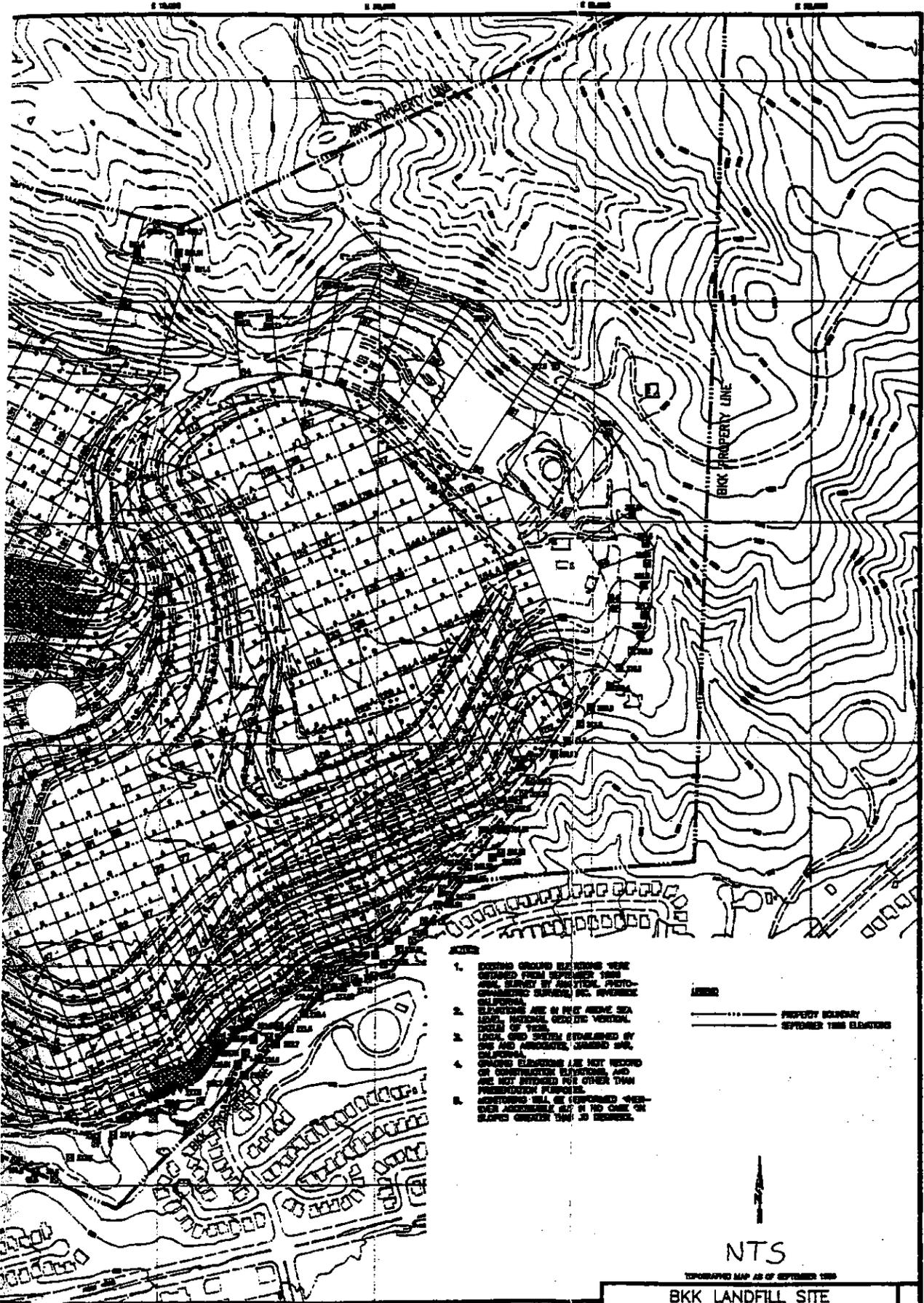


**LEGEND**

-  CLASS I LIMITS APPROX. BOUND BY FE GRID (X DENOTES GRID NUMBER)
-  SHADED GRIDS WILL BE MONITORED WHERE POSSIBLE EXCLUDING ANOMALIES
-  ROUTE to A, B, C, or D
-  GAS WELL

<b>1.8E1K SITE</b>	
BRK CLASS I LANDFILL AGRD RULE 1180.1 GAS WELLS AND GRIDS	
NTS	
5/28/00	1180.1-3





1. EXISTING GROUND ELEVATIONS WERE OBTAINED FROM REVISIONS TO THE 1964 MAP BY A.S. SYSTEM PHOTOGRAPHIC SURVEY, INC. RIVERSIDE CALIFORNIA.
2. ELEVATIONS ARE IN FEET ABOVE SEA LEVEL. HORIZONTAL GRID IS VERTICAL. SCALE OF 1" = 100'.
3. LOCAL GRID SYSTEM ESTABLISHED BY OAS AND ASSOCIATES, SAN DIEGO, CALIFORNIA.
4. GROUND ELEVATIONS ARE NOT RECORD OR CONSTRUCTION ELEVATIONS, AND ARE NOT INTENDED OTHER THAN PRELIMINARY PURPOSES. ADDITIONAL WILL BE OBTAINED WHEN THEY ARE AVAILABLE AT A 10' OR GREATER SLOPE GRADIENT THAN 3% MINIMUM.

----- PROPERTY BOUNDARY  
 ----- ELEVATIONS

NTS

TOPOGRAPHIC MAP AS OF SEPTEMBER 1988

**BKK LANDFILL SITE  
 AQMD RULE 1150.1  
 PROBES AND GRIDS**

**BKK** ENGINEERING AND SURVEYING  
 1000 S. GARDEN AVENUE  
 SAN ANTONIO, TEXAS 78205

DATE	BY	NO.
1/28/89	J. AVANCE	1/28
5/26/89	P. SCHEIDT	1/28
DATE	BY	NO.
5/26/89	J. AVANCE	1/28

DATE: 5/26/89 1150.1-3

DRAWING NO.

BKK LANDFILL CLASS I  
VERTICAL GAS WELLS

AP ID NO	LNWLNO	MAP ID NO	LNWLNO	MAP ID NO	LNWLNO	MAP ID NO	LNWLNO
1	W1020125	41	W1041875	81	W74014.5	121	W860-15
2	W102015	42	W104HB10	82	W780-01	122	W860-17
3	W102017	43	W660-02	83	W780-02	123	W860-19
4	W102019	44	W660-04	84	W780-04	124	W860-20
5	W102021	45	W660-06	85	W780-06	125	W860-22
6	W102023	46	W660-08	86	W780-08	126	W860-23
7	W102023R	47	W660-10	87	W780-10	127	W860-24
8	W102035R	48	W660-S01	88	W780-12	128	W860-25
9	W102036	49	W660-S02	89	W780-14	129	W860-26
10	W102037	50	W660-S03	90	W780-16	130	W860-27
11	W1020AS1	51	W660-S04	91	W780-18	131	W860-28
12	W1020AS2	52	W660-S05	92	W780-S01	132	W860-30
13	W1020AS3	53	W740-00	93	W780-S02	133	W860-S01
14	W1020AS4	54	W740-01	94	W820-00	134	W860-S02
15	W1020BS1	55	W740-02R	95	W820-01	135	W860-S03
16	W1020BS2	56	W740-03	96	W820-02	136	W860-S04
17	W1020CS1	57	W740-04R	97	W820-03	137	W860-S05
18	W1020CS2	58	W740-05	98	W820-04	138	W860-S06
19	W1040-90	59	W740-06R	99	W820-06	139	W86027.5
20	W1040-91	60	W740-07	100	W820-08	140	W86028.5
21	W1040-92	61	W740-08R	101	W820-10	141	W900-26
22	W1040-93	62	W740-09	102	W820-12	142	W900-27
23	W1040-94	63	W740-10	103	W820-14	143	W900-28
24	W1040-95	64	W740-11	104	W820-16	144	W900-29
25	W1040-96	65	W740-12	105	W820-17	145	W900-31
26	W1040-97	66	W740-125	106	W820-18	146	W900-33
27	W1040-98	67	W740-14	107	W820-19	147	W900-35
28	W1040-99	68	W740-16R	108	W820-20	148	W900-S11
29	W104018	69	W740-18	109	W820-22	149	W900-S12
30	W1040DS2	70	W740-20	110	W820-24	150	W900-S13
31	W1040DS3	71	W740-22	111	W860-00	151	W900-S14
32	W1040HB1	72	W740-24	112	W860-01	152	W940-02
33	W1040HB2	73	W740-S01	113	W860-02	153	W940-03
34	W1040HB3	74	W740-S02	114	W860-03	154	W940-04
35	W1040HB4	75	W740-S03	115	W860-05	155	W940-05
36	W1040HB5	76	W740-S04	116	W860-07	156	W940-07
37	W1040HB6	77	W740-S05	117	W860-09	157	W940-09
38	W1040HB7	78	W740-S06	118	W860-11	158	W940-SQ1
39	W1040HB8	79	W740-S07	119	W860-12	159	W940-S02
40	W1040HB9	80	W74013.5	120	W860-13	160	W940-S03

BKK LANDFILL CLASS I  
VERTICAL GAS WELLS

MAP ID NO	LNWLNO						
161	W940-S04	201	WA-013.4	241	WA150-14	281	WB20.50
162	W940-S05	202	WA-013R	242	WA150-15	282	WB20.75
163	W940-S06	203	WA-014	243	WA1502.5	283	WB21
164	W940-S09	204	WA-014.6	244	WA1505.5	284	WB21.25
165	W940-S10	205	WA-015	245	WAA-001	285	WB21.75R
166	W980-S05	206	WA-015.5	246	WB-S05	286	WB22
167	W980-S07	207	WA-016	247	WB-S06	287	WB22.25R
168	W980-S08	208	WA-016.3	248	WB-S07	288	WB22.35R
169	W98007.5	209	WA-017	249	WB-S08	289	WB22.50
170	W98009	210	WA-018	250	WB-S11	290	WB22.50R
171	W98011	211	WA-019	251	WB-S12	291	WB22.75
172	W98013	212	WA-13.4R	252	WB01	292	WB23
173	W98015	213	WA-S01	253	WB02	293	WB23.25
174	W98017	214	WA-S03	254	WB03	294	WB23.50
175	W98019	215	WA-S04	255	WB04	295	WB23.50R
176	W98019R	216	WA-S05	256	WB05	296	WB23.75
177	W98022R	217	WA-S06	257	WB06	297	WB24
178	WA-001	218	WA-S07R	258	WB07	298	WB24.25
179	WA-002	219	WA-S08	259	WB08	299	WB24.50R
180	WA-003	220	WA-S09	260	WB09	300	WB24.75
181	WA-004	221	WA-S10	261	WB10	301	WB24R
182	WA-005	222	WA-S11	262	WB11	302	WB25
183	WA-005.6	223	WA-S12	263	WB12	303	WB25.50R
184	WA-006	224	WA-S13	264	WB13	304	WB25.65
185	WA-006.6	225	WA-S14	265	WB14	305	WB25.75S
186	WA-007	226	WA-S15	266	WB15	306	WB25R
187	WA-007.4	227	WA100	267	WB17	307	WB26
188	WA-008	228	WA150-01	268	WB17.35	308	WB26.25S
189	WA-008.5	229	WA150-02	269	WB17.50	309	WB26.50
190	WA-009	230	WA150-03	270	WB17.75	310	WB26.50R
191	WA-009.5	231	WA150-04	271	WB18	311	WB26.75S
192	WA-010	232	WA150-05	272	WB18.25	312	WB27
193	WA-010.2	233	WA150-06	273	WB18.50	313	WB27.25S
194	WA-010.4	234	WA150-07	274	WB18.75	314	WB27.40R
195	WA-011	235	WA150-08	275	WB19	315	WB27.75S
196	WA-011.2	236	WA150-09	276	WB19.25	316	WB28
197	WA-011.5	237	WA150-10	277	WB19.50	317	WB28-DW
198	WA-012	238	WA150-11	278	WB19.75	318	WB28.05S
199	WA-012.4	239	WA150-12	279	WB20	319	WB28.25S
200	WA-013	240	WA150-13	280	WB20.25	320	WB28.37S

BKK LANDFILL CLASS I  
VERTICAL GAS WELLS

AP ID NO	LNWLNO	MAP ID NO	LNWLNO	MAP ID NO	LNWLNO	MAP ID NO	LNWLNO
321	WB28.50S	361	WC-S04	401	WD-S01	441	WE03R
322	WB28.67S	362	WC-S13	402	WD-S02	442	WE05
323	WB28.75S	363	WC-S14	403	WD-S03	443	WE05R
324	WB29	364	WC02	404	WD-S04	444	WE07
325	WB29.05S	365	WC04	405	WD-S05	445	WE09
326	WB29.25S	366	WC06	406	WD-S06	446	WE09.25S
327	WB29.37S	367	WC08	407	WD00	447	WE09.5
328	WB29.50S	368	WC10	408	WD00.05	448	WE10
329	WB29.67S	369	WC12	409	WD00R	449	WE10.25S
330	WB29.75S	370	WC14	410	WD01	450	WE10.75S
331	WB29.80	371	WC16	411	WD01R	451	WE11
332	WB30	372	WC18	412	WD03	452	WE11-DW
333	WB30.05S	373	WC19	413	WD04.4	453	WE11.25S
334	WB30.25S	374	WC20	414	WD05	454	WE11.75S
335	WB30.37S	375	WC20.50	415	WD05.90	455	WE12.00
336	WB30.50S	376	WC20.50R	416	WD05R	456	WE12.25S
337	WB30.67S	377	WC21	417	WD07	457	WE12.75S
338	WB30.75S	378	WC21.50	418	WD07.8	458	WE13.25S
339	WB30.8	379	WC21.50R	419	WD07R	459	WE13.75S
340	WB31	380	WC21R	420	WD09	460	WE14.25S
341	WB31.05S	381	WC22	421	WD10.20	461	WF-S01
342	WB31.25S	382	WC23	422	WD10.70	462	WF-S02
343	WB31.37S	383	WC23.50	423	WD11	463	WF-S03
344	WB31.50S	384	WC23.75R	424	WD11.50	464	WF-S04
345	WB31.67S	385	WC24	425	WD12	465	WF01
346	WB31.75S	386	WC24.50	426	WD13	466	WF02
347	WB31.8	387	WC25	427	WD99	467	WF03
348	WB32	388	WC25.50	428	WE-98	468	WF05
349	WB32.05S	389	WC25.75R	429	WE-99	469	WF07
350	WB32.25S	390	WC26	430	WE-99R	470	WF09
351	WB32.50S	391	WC27	431	WE-S01	471	WF09.5
352	WB32.75S	392	WC27.25R	432	WE-S02	472	WF10
353	WB32.85S	393	WC27.800	433	WE-S03	473	WF11
354	WB32.95S	394	WC28	434	WE-S04	474	WF13
355	WB33	395	WC29	435	WE00	475	WFS21050
356	WB33.20S	396	WC29R	436	WE01	476	WG-05R
357	WB33.25S	397	WC30	437	WE02.9	477	WG-S01
358	WC-S01	398	WC31	438	WE03	478	WG-S02
359	WC-S02	399	WD-0.1	439	WE03.3	479	WG03
360	WC-S03	400	WD-0.2	440	WE03.6	480	WG05

BKK LANDFILL CLASS I  
VERTICAL GAS WELLS

MAP ID NO	LNWLNO						
481	WG07	521	WK-002.1	561	WSH-S06	601	WZ-001.7
482	WG09	522	WK-002.4	562	WSH-S07	602	WZ-002.3
483	WG11	523	WK-002.7	563	WSH-S08	603	WZ-002.7
484	WG13	524	WK-002.9	564	WSH-S09	604	WZ-003
485	WG15	525	WK-003	565	WSH-S10	605	WZ-004
486	WG424.2	526	WK-003.2	566	WSH-S11	606	WZ-005
487	WG425.2	527	WK-003.5	567	WSH-S12	607	WZ-006
488	WG426.2	528	WK-003.7	568	WSH-S13	608	WZ-007
489	WG432.5	529	WK-003.9	569	WSH-S14	609	WZ-008
490	WG433.5	530	WK-004	570	WSH-S15	610	WZ-009
491	WG434.2	531	WK-004.2	571	WSH-S16	611	WZ-010
492	WG434.5	532	WK-005	572	WSH-S17	612	WZ-011
493	WG434.8	533	WK-006	573	WSH-S18	613	WZ-012
494	WG435.3	534	WK-007	574	WSH-S19	614	WZ-013
495	WG435.5	535	WK-008	575	WSH-S20	615	WZ-014
496	WG435.7	536	WK-009	576	WSH-S21	616	WZ-015
497	WG437	537	WK-010	577	WSH-S23	617	WZ-016
498	WH-S01	538	WK-A11	578	WSH-S24	618	WZ-017
499	WH-S02	539	WK-A12	579	WSH-S25	619	WZ-018
500	WH04	540	WK-A13	580	WSH-S26	620	WZ-019
501	WH06	541	WLEW-1	581	WSH-S27	621	WZ-020
502	WH08	542	WLEW-1R	582	WSH-S28	622	WZ-021
503	WH10	543	WLEW-3	583	WSH-S29	623	WZ-022
504	WH12	544	WLEW-4	584	WSH-S30	624	WZ-023
505	WH14	545	WLEW-5	585	WSH02	625	WZ-024
506	WH16	546	WLEW-6	586	WSH03	626	WZ-14.5
507	WI-S01	547	WLEW4R	587	WSH28.00	627	WZ-15.5
508	WI-S02	548	WSH-D01	588	WSH31.00	628	WZ16.75S
509	WI01	549	WSH-D02	589	WSH33.00	629	WZ17.25S
510	WI03	550	WSH-D03	590	WSH35.00	630	WZ17.75S
511	WI05	551	WSH-D04	591	WTSWP-1	631	WZ18.25S
512	WI05R	552	WSH-D05	592	WY-004.6	632	WZ18.45S
513	WI06	553	WSH-D06	593	WY-005	633	WZ18.75S
514	WI08	554	WSH-D07	594	WY-005.7	634	WZ19.25S
515	WI10	555	WSH-D08	595	WY-006	635	WZ19.75S
516	WI10R	556	WSH-S01	596	WY-006.4	636	WZ20.25S
517	WI12	557	WSH-S02	597	WY-006.8	637	WZ20.75S
518	WK-001	558	WSH-S03	598	WY-09	638	WZ21.25S
519	WK-001.9	559	WSH-S04	599	WY-6.6	639	WZ21.75S
520	WK-002	560	WSH-S05	600	WZ-001	640	WZ22.25S
644	WZ23.80S	643	WZ23.70S	642	WZ23.25S	641	WZ22.75S



# South Coast Air Quality Management District

21865 E. Copley Drive, Diamond Bar, CA 91765-4182  
(909) 396-2000 • <http://www.aqmd.gov>

June 20, 2000

BKK CORPORATION, LANDFILL DIVISION GNRL  
2210 S AZUSA AVE  
WEST COVINA, CA 91792

Attention: PETER SORIANO

## RULE 1150.1 COMPLIANCE PLAN

Reference is made to your Application for a Rule 1150.1 Compliance Plan for the following landfill.

Facility ID:	55449	Sector:	SM
Application No:	0	Phone No:	(626) 965-0911
Common Name:	BKK (Class III)		
Location Address:	2210 S AZUSA AVE		
City:	WEST COVINA	, CA	91792

South Coast Air Quality Management District (AQMD) has reviewed your application and approved the following alternatives to Rule 1150.1 requirements for your landfill. Rule 1150.1 Compliance Plans may be submitted by each owner or operator responsible for that section of the rule directly under their control, or by the owner or operator responsible for the entire landfill. Compliance under the alternative provision is achieved if only one owner or operator with responsibility submits a compliance plan for the applicable section of the rule. Only one alternative to each rule requirement shall be allowed for multiple Compliance Plans issued to one landfill. The approved alternative shall be written into each Compliance Plan. The AQMD reserves the right to deny any or all of these alternatives if it is determined that the alternative(s) allow emissions from the landfill that would not have occurred if the owner or operator was complying with the rule requirements.

Where no Rule 1150.1 alternatives are specified below, compliance with provisions of Rule 1150.1 is required. You are further advised that other governmental agencies may require approval for the operation of this landfill and it is the responsibility of the

applicant to obtain approval from each agency. This compliance plan will remain in force until either a new plan is filed and approved or the applicant is notified by the Executive Officer of revisions to this plan. The AQMD shall not be responsible or liable for any losses resulting from measures required or taken pursuant to the requirements of this approved Rule 1150.1 Compliance Plan.

If you have any questions regarding this matter, please phone Gaurang Rawal, Air Quality Engineer at (909) 396-2543.

Sincerely,



Larry M. Bowen  
Senior Manager

cc: Rafael Reynosa  
Air Quality Inspector

Issue Number: 1

(Adopted April 5, 1985)(Amended April 10, 1998)  
(Amended March 17, 2000)

**RULE 1150.1. CONTROL OF GASEOUS EMISSIONS FROM  
MUNICIPAL SOLID WASTE LANDFILLS**

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The reference numbers in the left hand margin of the rule refer to sections of  
40 CFR, Part 60, Subpart WWW (NSPS)

**RULE 1150.1. CONTROL OF GASEOUS EMISSIONS FROM MUNICIPAL  
SOLID WASTE LANDFILLS**

(a) Purpose

The rule is intended to limit Municipal Solid Waste (MSW) landfill emissions to prevent public nuisance and possible detriment to public health caused by exposure to such emissions.

(b) Applicability

This rule applies to each active and inactive MSW landfill.

(c) Definitions

Terms used but not defined in this rule have the meaning given them in 40 CFR, Part 60, Section 60.751 (Definitions):

- (1) ADMINISTRATOR means the Executive Officer of the South Coast Air Quality Management District (District).
- (2) ACTIVE LANDFILL means an MSW landfill that has received waste on or after November 8, 1987.
- (3) BACKGROUND means the local ambient concentration of total organic compounds (TOC) measured as methane determined by holding the instrument probe approximately 5 to 6 feet above the landfill surface.
- (4) CLOSED LANDFILL means a disposal facility that has ceased accepting waste and was closed in accordance with all applicable federal, state and local statutes, regulations, and ordinances in effect at the time of closure.
- (5) INACTIVE LANDFILL means an MSW landfill where solid waste had been disposed of before November 8, 1987 and no more subsequent solid waste disposal activity has been conducted within the disposal facility.
- (6) MSW LANDFILL means an entire disposal facility in a contiguous geographical space where solid waste is placed in or on land. An MSW landfill may be either active or inactive.
- (7) OPERATOR means the person:
  - (A) Operating the MSW landfill, or
  - (B) Operating the MSW landfill gas collection or control system.
- (8) OWNER means the person holding Title to the property.

- (9) PERIMETER means the outer boundary of the entire waste disposal property.
- (10) PROFESSIONAL ENGINEER means an engineer holding a valid certificate issued by the State of California Board of Registration for Professional Engineers and Land Surveyors or a state offering reciprocity with California.
- (11) TOXIC AIR CONTAMINANT (TAC) means an air contaminant which has been identified as a hazardous air pollutant pursuant to Section 7412 of Title 42 of the United States Code; or has been identified as a TAC by the Air Resources Board pursuant to Health and Safety Code Section 39655 through 39662, or which may cause or contribute to an increase in mortality or an increase in serious illness, or potential hazard to human health.

(d) Active Landfill Design and Operation Requirements

The MSW landfill owner or operator shall comply with the provisions of paragraphs (d)(1) through (d)(11):

- (1) If a valid Permit to Construct or Permit to Operate for the collection and control system that meets the requirements of subparagraphs (d)(1)(A) through (d)(1)(C) has not been issued by the District by the adoption date of this rule, submit a site-specific collection and control system design plan. The design plan shall be prepared by a Professional Engineer and sent to the Executive Officer with applications for Permits to Construct or Permits to Operate no later than one year after the adoption of this rule. The Executive Officer shall review the collection and control system design and either approve it, disapprove it, or request that additional information be submitted.

752(b)(2)(i)  
752(b)(2)(i)(D)

- (A) The collection and control system shall be designed to handle the maximum expected gas flow rate from the entire area of the landfill that requires control, to minimize migration of subsurface gas to comply with paragraph (d)(4), and to collect gas at an extraction rate to comply with paragraphs (d)(5) and (d)(6). For the purposes of calculating the maximum expected gas generation flow rate from the landfill, one of the equations in 40 CFR, Part 60, Section 60.755(a)(1) shall be used. Another method may be used

752(b)(2)(ii)(A)(1), (3), (4)  
755(a)(1)  
758(b)(1)(i)

to determine the maximum gas generation flow rate, if the method has been approved by the Executive Officer.

- (B) If a valid Permit to Construct or Permit to Operate has not been issued by the District for the collection and control system, the collection and control system design plan shall either conform with specifications for active collection systems in 40 CFR, Part 60, Section 60.759 or include a demonstration to the Executive Officer's satisfaction of the sufficiency of the alternative provisions describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. Alternatives to this rule shall be submitted as specified in subdivision (i).

752(b)(2)(i)(C)  
756(e)

- (C) The design plan shall provide for the control of collected MSW landfill emissions through the use of a collection and control system meeting the applicable requirements in clauses (d)(1)(C)(i) and (d)(1)(C)(ii):

752(b)(2)(iii)

- (i) Route all the collected gas to a control system designed and operated to either reduce NMOC by at least 98 percent by weight or reduce the outlet NMOC concentration to less than 20 parts per million by volume (ppmv), dry basis as hexane at 3 percent oxygen. The required reduction efficiency or ppmv shall be established by an initial source test, required under 40 CFR, Part 60, Section 60.8 and annually thereafter using the test methods specified in paragraph (j)(1). The annual source test shall be conducted no later than 45 days after the anniversary date of the initial source test.

**ALTERNATIVE: THE FOLLOWING FREQUENCY  
SHALL BE USED FOR SOURCE TESTING  
IDENTICAL FLARES LISTED ON ONE  
PERMIT TO OPERATE WHERE  
IDENTICAL MEANS, BUT IS NOT LIMITED  
TO:**

**MAKE AND MODEL, BURNERS, OPERATIONAL  
SETTINGS, MAINTENANCE AND FUELS.**

**SINGLE BACKUP FLARE- AFTER EVERY 4000 HOURS OF OPERATION.**

**MULTIPLE BACKUP FLARES - ONE FLARE AFTER EVERY 4000 HOURS OF CUMULATIVE BACKUP OPERATION FOR ALL FLARES LISTED ON THE PERMIT TO OPERATE. ALTERNATE TESTING OF THE FLARES SUCH THAT EACH FLARE IS TESTED.**

**NON-BACKUP FLARES: AT LEAST ONE FLARE EVERY YEAR AND THEN ALTERNATE ALL OTHERS SUCH THAT EACH IS SOURCE TESTED AT LEAST ONCE EVERY THREE YEARS.**

- (I) If a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone. Where the landfill gas is the primary fuel for the boiler or process heater, introduction of the landfill gas stream into the flame zone is not required.
  - (II) The control device shall be operated within the operating parameter ranges established during the initial or most recent compliant source test. The operating parameters to be monitored are specified under paragraph (e)(6).
- (ii) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of clause (d)(1)(C)(i).

(2) Install and operate the collection and control system no later than 18 months after the submittal of the design plan.

752(b)(2)(ii)

(3) If the District has not issued prior written approval for subsurface refuse boundary sampling probes, design and install subsurface refuse boundary

sampling probes as specified in Section 1.1, Attachment A, to determine whether landfill gas migration exists. Installation of the refuse boundary probes shall be no later than 18 months after the submittal of the collection and control design plan as specified in paragraph (d)(1).

**ALTERNATIVE: THE SUBSURFACE REFUSE BOUNDARY PROBE LOCATIONS AS REFERENCED IN THE TOPOGRAPHIC MAP DATED 5/25/00 OR THE MOST RECENT UPDATE, WITH SHEET TITLE "BKK LANDFILL SITE AQMD RULE 1150.1 PROBES AND GRIDS" ARE APPROVED. ALL FUTURE DESIGNS AND INSTALLATIONS NOT MEETING THE RULE REQUIREMENTS, SHALL BE SUBMITTED FOR AQMD PRE-CONSTRUCTION APPROVAL WITH A COMPLIANCE PLAN APPLICATION.**

(4) Operate the collection system to prevent the concentration of TOC measured as methane from exceeding five percent by volume in the subsurface refuse boundary sampling probes constructed for the purposes of detecting lateral migration of landfill gas away from the waste mass, as determined from collected samples.

(5) Operate the collection system to prevent the concentration of TOC measured as methane from exceeding 50 ppmv as determined by integrated samples taken on numbered 50,000 square foot landfill grids.

(6) Operate the collection system to prevent the concentration of TOC measured as methane from exceeding 500 ppmv above background as determined by instantaneous monitoring at any location on the landfill, except at the outlet of any control device.

(7) Operate the control or treatment system at all times when the collected gas is routed to the system. In the event the collection, treatment or control system is inoperable, the gas conveying system shall be shut down and all valves in the collection, treatment and control system contributing to venting of the gas to the atmosphere shall be closed no later than one hour after such breakdown or no later than one hour after the time the owner or operator knew or reasonably should have known of its occurrence.

(8) Operate the collection, treatment and control system until all the exemption criteria under subdivision (k) has been met and the reports specified in subparagraph (f)(2)(D) have been submitted to the Executive Officer.

- (9) Design, install and operate a wind speed and direction monitoring system with a continuous recorder of the requirements in subparagraphs (d)(9)(A) and (d)(9)(B), at a site which is representative of the wind speed and direction in the areas being sampled. The wind velocity shall be recorded throughout the sampling period. The wind direction transmitter shall be oriented to true north using a compass. The monitor shall be installed according to the criteria set forth in 40 CFR, Part 50.
- (A) For wind speed use a 3 cup assembly, with a range of 0 to 50 miles per hour, with a threshold of 0.75 mile per hour or less.
- (B) For wind direction use a vane, with a range of 0 to 540 degrees azimuth, with a threshold of plus-minus 2 degrees.
- (10) Comply with the requirements of Section 21140 – Final Cover, of California Code of Regulations Title 27, Subchapter 5 – Closure and Post-Closure Maintenance, upon closure of a MSW landfill unit, incorporated herein as Attachment B.
- (11) Comply with the requirement of Section 20200 – State Water Resources Conservation Board (SWRCB) Applicability and Classification Criteria of California Code of Regulations Title 27, Article 2 – SWRCB, Waste Classification and Management, with respect to the disposal of liquids and semi-solid waste at Class III landfills, incorporated herein as Attachment C.

(e) **Active Landfill Sampling and Monitoring Requirements**

The MSW landfill owner or operator shall comply with the provisions of paragraphs (e)(1) through (e)(6), after installation of the landfill gas control system:

- (1) Monitor and collect samples for analysis as specified in Section 1.0, Attachment A, to determine the concentrations of TOC and TAC each month from the subsurface refuse boundary sampling probes, to assure continued compliance. Any measurement of 5 percent TOC by volume or greater shall be recorded as an exceedance and the actions specified in subparagraphs (e)(1)(A) through (e)(1)(C) shall be taken.

**ALTERNATIVE: QUARTERLY**

- (A) The probe shall be identified and the location recorded as specified in Section 1.6, Attachment A.

- (B) Adjustments to the vacuum of adjacent wells to increase the gas collection in the vicinity of the probe with the exceedance shall be made and the probe resampled no later than 10 calendar days after detecting the exceedance.
  - (C) If the resampling of the probe shows a second exceedance, additional corrective action shall be taken and the probe shall be resampled again no later than 10 calendar days after the second exceedance. If the resampling shows a third exceedance, it is a violation unless the owner or operator determines that a new or replacement gas collection well is needed. The owner or operator must install and operate the new or replacement well no later than 45 days after detecting the third exceedance.
- (2) Collect monthly integrated samples for analysis as specified in Section 2.0, Attachment A, to determine the concentrations of TOC and TAC from the landfill surface, to assure continued compliance. Any reading of 50 ppmv or greater shall be recorded as an exceedance and the actions specified in subparagraphs (e)(2)(A) through (e)(2)(C) shall be taken.

**ALTERNATIVE: QUARTERLY**

- (A) The grid shall be identified and the location recorded as specified in Section 2.8, Attachment A.
  - (B) Cover maintenance or adjustments to the vacuum of adjacent wells to increase the gas collection in the vicinity of the grid with the exceedance shall be made and the grid resampled no later than 10 calendar days after detecting the exceedance. If measurable precipitation occurs within the 10 calendar days, all resampling and analysis shall comply with Section 2.2.2, Attachment A.
  - (C) If the resampling of the grid shows a second exceedance, additional corrective action shall be taken and the grid shall be resampled again no later than 10 calendar days after the second exceedance. If the resampling shows a third exceedance, it is a violation unless the owner or operator determines that a new or replacement gas collection well is needed. The owner or operator must install and operate the new or replacement well no later than 45 days after detecting the third exceedance.
- (3) Monitor instantaneously as specified in Section 3.0, Attachment A, to determine the concentration of TOC each calendar quarter, to assure

continued compliance. Any reading of 500 ppmv TOC or greater shall be recorded as an exceedance and the actions specified in subparagraphs (e)(3)(A) through (e)(3)(C) shall be taken. Any closed landfill that has no monitored exceedances of the 500 ppmv standard in three consecutive quarterly monitoring periods may monitor annually. Any reading of 500 ppmv TOC or more above background detected during the annual monitoring or compliance inspections shall result in a return to quarterly monitoring for that landfill.

**ALTERNATIVE: SEMI-ANNUALLY FOR THAT PORTION OF THE LANDFILL THAT HAS A CAP WHICH IS IN ACCORDANCE WITH THE CLOSURE DESIGN APPROVED BY THE CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD (CIWMB) AS DOCUMENTED BY A LETTER FROM A THIRD-PARTY CONSTRUCTION QUALITY ASSURANCE FIRM, TASKED WITH MONITORING THE ONGOING CLOSURE CONSTRUCTION. THE OWNER OR OPERATOR SHALL PROVIDE A COPY OF THE THIRD-PARTY LETTER FOR THE EXECUTIVE OFFICER'S APPROVAL PRIOR TO REDUCING THE MONITORING FREQUENCY FROM QUARTERLY TO SEMI-ANNUALLY.**

**AFTER FINAL CLOSURE THE OWNER OR OPERATOR SHALL PROVIDE THE EXECUTIVE OFFICER WITH A COPY OF THE CLOSURE CERTIFICATION ACKNOWLEDGEMENT LETTER, OR EQUIVALENT DOCUMENT, WRITTEN BY CIWMB.**

- (A) The location of each monitored exceedance shall be marked on the landfill or identified by using a global positioning system and the location recorded as specified in Section 3.4, Attachment A.
- (B) Cover maintenance or adjustments to the vacuum of adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be remonitored no later than 10 calendar days after detecting the exceedance.
- (C) If the remonitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be remonitored again no later than 10 days after the second exceedance. If the remonitoring shows a third exceedance, it is a

violation unless the owner or operator determines that a new or replacement gas collection well is needed. The owner or operator must install and operate the new or replacement well no later than 45 days after detecting the third exceedance.

- (4) Collect a monthly landfill gas sample for analysis as specified in Section 4.0, Attachment A, to determine the concentrations of TOC and TAC from the main gas collection header line entering the gas treatment and/or gas control systems.

**ALTERNATIVE: SEE CLASS I LANDFILL**

- (5) Collect monthly ambient air samples for analysis as specified in Section 5.0, Attachment A, to determine the concentrations of TOC and TAC from the landfill property boundary.

**ALTERNATIVE: QUARTERLY**

- (6) Monitor the collection and control system equipment specified under subparagraphs (e)(6)(A) and (e)(6)(B) in order to comply with subparagraph (d)(1)(C).

756(b)

- (A) For an enclosed combustor install, calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment:

- (i) A temperature monitoring device equipped with a continuous recorder and having an accuracy of plus-minus 1 percent of the temperature being measured expressed in degrees Celsius or Fahrenheit. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity greater than 44 megawatts.
- (ii) At least one gas flow rate measuring device that shall record the flow to the control device(s) at least every 15 minutes.

756(d)

- (B) For a device other than an enclosed combustor, demonstrate compliance with subparagraph (d)(1)(C) by providing information satisfactory to the Executive Officer describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. Alternatives to this rule shall be submitted as specified in subdivision (i). The Executive Officer may specify additional appropriate monitoring procedures.

## (f) Active Landfill Recordkeeping and Reporting Requirements

The MSW landfill owner or operator shall keep all records up-to-date, readily accessible and maintained for at least a period of 5 years and made available to District staff upon request. Records older than 2 years may be maintained off-site, if they are retrievable no later than 4 hours after request.

758(a)

(1) The records required in subparagraphs (f)(1)(A) through (f)(1)(H) shall be maintained at the facility.

758(b)

(A) For the life of the control equipment as measured during the initial source test or compliance determination:

- (i) The control device vendor specifications.
- (ii) The maximum expected gas generation flow rate as calculated in subparagraph (d)(1)(A).
- (iii) When seeking to demonstrate compliance with subparagraph (d)(1)(C) through the use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity greater than 44 megawatts:

(F) The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the source test.

**ALTERNATIVE: FOR THE FLARE(S),  
CONTINUOUSLY RECORD THE  
INSTANTANEOUS COMBUSTION  
TEMPERATURE.**

- (II) The reduction of NMOC determined as specified in clause (d)(1)(C)(i) achieved by the control device.
- (iv) When seeking to demonstrate compliance with subclause (d)(1)(C)(i)(I) through the use of a boiler or process heater of any size: a description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the source testing.

(B) The data required to be recorded under Section 1.6, Attachment A, for subsurface refuse boundary sampling probes and all remedial actions taken for exceedances of the 5 percent TOC standard required in paragraph (d)(4).

- (C) The data required to be recorded under Section 2.8, Attachment A, for integrated samples and all remedial actions taken for exceedances of the 50 ppmv TOC standard required in paragraph (d)(5).
- (D) The data required to be recorded under Section 3.4, Attachment A, for instantaneous monitoring and all remedial actions taken for exceedances of the 500 ppmv TOC standard required in paragraph (d)(6).
- (E) The data required to be recorded under Section 4.5, Attachment A, for landfill gas samples collected from the main gas collection header line entering the gas treatment and/or gas control systems.
- (F) The data required to be recorded under Section 5.7, Attachment A, from ambient air collected at the landfill property boundary.
- (G) A description and the duration of all periods when the collection, treatment or control device was not operating for a period exceeding one hour and the length of time the system was not operating.
- (H) Continuous records of the equipment operating parameters specified to be monitored under paragraph (e)(6) as well as records for periods of operation during which the parameter boundaries established during the most recent source test are exceeded.
- (i) The following constitute exceedances that shall be recorded:
- (I) For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28° C (82° F) below the average combustion temperature during the most recent source test at which compliance with subparagraph (d)(1)(C) was determined.
- (II) For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under clause (f)(1)(A)(iv).

758(e)

757(f)(3)

758(c)

- (ii) Records of the indication of flow to the control device specified under paragraph (e)(6)(A)(ii).
  - (iii) Each owner or operator who uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with subparagraph (d)(1)(C) shall keep records of all periods of operation of the boiler or process heater. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other State, local, Tribal, or Federal regulatory requirements.)
- (2) The reports required in subparagraphs (f)(2)(A) through (f)(2)(D) shall be submitted to the Executive Officer (Either paper copy or electronic formats are acceptable).
- (A) The initial source test report no later than 180 days after start-up and each succeeding complete annual source test report no later than 45 days after the anniversary date of the initial source test, for all control systems required in subparagraph (d)(1)(C).
  - (B) A report no later than 45 days after the last day of each calendar quarter with the information required in clauses (f)(2)(B)(i) and (f)(2)(B)(ii).
    - (i) All exceedances of the emission standards required in paragraphs (d)(4), (d)(5) and (d)(6) in the format required under Sections 1.6, 2.8 and 3.4, Attachment A. All exceedance resampling/remonitoring and each corrective action required under paragraphs (e)(1), (e)(2) and (e)(3). If there are no exceedances, submit a letter stating there were no exceedances for that quarter.
    - (ii) All TAC analyses required in paragraphs (e)(1) through (e)(5).
  - (C) A closure report to the Executive Officer no later than 30 days after waste acceptance cessation. The Executive Officer may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR, Part 258, Section 258.60 or the applicable federal, state and local statutes, regulations, and ordinances in effect at the time of closure. If a closure report has been submitted

757(d)

to the Executive Officer, no additional wastes shall be placed into the landfill without filing a notification of modification as described under 40 CFR, Part 60, Section 60.7(a)(4).

757(e)

(D) A decommissioning report to the Executive Officer 30 days prior to well capping, removal or cessation of operation of the collection, treatment or control equipment. The decommissioning report shall contain all of the items as specified in clauses (f)(2)(D)(i) through (f)(2)(D)(iii):

- (i) A copy of the closure report submitted in accordance with subparagraph (f)(2)(C).
- (ii) A copy of the initial source test report demonstrating that the collection and control system has been installed a minimum of 15 years.
- (iii) All records needed to verify the landfill meets the exemption criteria under subdivision (k).

(g) Active Landfill Compliance Schedule

The MSW landfill owner or operator shall comply with the active landfill requirements of this rule or submit alternatives to this rule as specified in subdivision (i) no later than 90 days after April 10, 1998. Rule 1150.1 Compliance Plans previously submitted to the District shall remain in effect during the 90 days after April 10, 1998, or until the owner or operator has received an approved alternative Rule 1150.1 Compliance Plan submitted as specified in subdivision (i).

(h) Inactive Landfill Requirements

The MSW landfill owner or operator shall comply with either the applicable requirements in paragraphs (h)(1) and (h)(2) or submit alternatives to this rule as specified in subdivision (i).

- (1) Inactive landfills that have a landfill gas collection system shall meet all of the active landfill requirements. For those inactive landfills without a gas collection system and determined to need one, meet all of the active landfill requirements, except the collection and control system design plan and applications for permits shall be submitted no later than one year after notification by the Executive Officer.
- (2) Inactive landfills without a gas collection system:

- (A) Upon discovery of TOC measured as methane exceeding 500 ppmv at any location on the landfill surface, apply mitigation measures such as compaction, additional cover, and/or watering to reduce the emissions to less than 500 ppmv. The procedure used for measurement of TOC shall meet the requirements of Section 3.0, Attachment A.
- (B) Submit the following Data and/or meet the required action in paragraph (h)(1):
- (i) At any time after the adoption of this rule, but not later than 30 days after the receipt of a request, submit to the Executive Officer a screening questionnaire pursuant to California Air Resources Board Health and Safety Code (H & S) 41805.5.
  - (ii) No later than 90 days after the date of a second request, submit to the Executive Officer a solid waste air quality assessment test (SWAT) report pursuant to H & S 41805.5, to determine whether or not a landfill gas collection and control system and/or a subsurface refuse boundary probe sampling system shall be required to be installed.
  - (iii) If additional time is needed to provide the information required in clauses (h)(2)(B)(i) and (h)(2)(B)(ii), a written request for an extension may be submitted in writing to the Executive Officer, indicating the amount of time that is needed to obtain such information. Such a request for an extension may be submitted to the Executive Officer no later than 30 days after the receipt of the Executive Officer's requests as specified in clauses (h)(2)(B)(i) and (h)(2)(B)(ii).
  - (iv) Upon notification by the Executive Officer that a landfill gas collection and control system and/or a subsurface refuse boundary probe sampling system shall be required, comply with paragraph (h)(1).

(i) Alternatives:

Because of the many site-specific factors involved in the design and operation of 752(b)(2)(i)(B) landfill gas systems, alternatives to the requirements, test methods, procedures,

compliance measures, monitoring, recordkeeping or reporting provisions of this rule may be necessary. All alternatives to the requirements of this rule shall be submitted to the Executive Officer in a Rule 1150.1 Compliance Plan. The Executive Officer shall review the Rule 1150.1 Compliance Plan and either approve it, disapprove it, or request that additional information be submitted. The Executive Officer shall deny the plan unless he determines that it will provide equivalent levels of emission control and enforceability, as would compliance with the requirements of this rule.

## (j) Test Methods

## (1) Methods of Analysis

754(d)

(A) Either U.S. EPA Reference Method 25 or U.S. EPA Reference Method 18, 40 CFR, Part 60, Appendix A shall be used to determine the efficiency of the control system in reducing NMOC by at least 98 percent by weight. If using Method 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The equation in subparagraph (j)(1)(B) shall be used to calculate efficiency.

(B) U.S. EPA Reference Method 25, 40 CFR, Part 60, Appendix A shall be used to determine the efficiency of the control system in reducing the outlet NMOC concentration to less than 20 ppmv, dry basis as hexane at 3 percent oxygen. Until, but not after District Method 25.3 has met equivalency as specified in paragraph (j)(2), U.S. EPA Reference Method 18, 40 CFR, Part 60, Appendix A may be used for this source test. If using Method 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:

$$\text{Control Efficiency} = (\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}}) / (\text{NMOC}_{\text{in}})$$

where,

$\text{NMOC}_{\text{in}}$  = mass of NMOC entering control device

$\text{NMOC}_{\text{out}}$  = mass of NMOC exiting control device

## (2) Equivalent Test Methods

Any other method demonstrated to be equivalent and approved in writing by the Executive Officers of the District, the California Air Resources Board (CARB), and the Regional Administrator of the United States Environmental Protection Agency (U.S. EPA), Region IX, or their designees, may be used to determine compliance with this rule.

(k) Exemptions

An MSW landfill may be temporarily exempt from all or any portion of the requirements of this rule if the owner or operator can demonstrate to the Executive Officer that the MSW landfill emissions meet the requirements of paragraphs (k)(1) through (k)(4). Temporary exemption may be independently determined by the Executive Officer, if the MSW landfill emissions meet the requirements of paragraphs (k)(1) through (k)(4). MSW landfills issued temporary exemption letters by the Executive Officer shall remain exempt, subject to periodic review, provided:

- (1) The MSW landfill complies with the requirements of paragraphs (d)(4), (d)(5) and (d)(6).
- (2) The MSW landfill emits less than 55 tons per year of NMOC as specified in 40 CFR, Part 60, Section 60.752(b) or, for a closed landfill, as specified in 40 CFR, Part 60, Section 60.752(b)(2)(v)(C).
- (3) The MSW landfill constitutes an insignificant health risk. In making this determination the Executive Officer shall consider the listed factors in subparagraphs (k)(3)(A) through (k)(3)(G). Where not specified, in evaluating the cancer risks and hazard indexes, the Executive Officer shall be guided by the definitions in District Rule 1401 - New Source Review of Carcinogenic Air Contaminants, and Rule 1402 - Control of Toxic Air Contaminants From Existing Sources.
  - (A) The proximity to, and any adverse impacts on, residences, schools, hospitals or other locations or structures which have children, or elderly or sick persons.
  - (B) The emission migration beyond the landfill property boundary.
  - (C) The complaint history.
  - (D) The age and closure date.
  - (E) The amount and type of waste deposited.
  - (F) That the emissions of carcinogenic air contaminants, specified in Table 1, Attachment A, from the landfill will not result in a

maximum individual cancer risk greater than one in one million ( $1 \times 10^{-6}$ ) at any receptor location.

- (G) That the emissions of TAC, specified in Table 1, Attachment A, from the landfill will not result in a total acute or chronic Hazard Index of greater than 1.

- (4) The MSW landfill is in compliance with District Nuisance Rule 402.

Such temporary exemption shall be reviewed periodically by the Executive Officer, to consider the land use surrounding the landfill and gaseous emissions, and the impact on the public. Depending upon the results of the review, the Executive Officer may extend or terminate the exemption.

- (1) Loss of Exemption

If an MSW landfill should have its temporary exemption terminated, the owner or operator shall comply with the active landfill requirements of this rule.

ATTACHMENT A

1.0 SUBSURFACE REFUSE BOUNDARY SAMPLING PROBES

Paragraph (d)(4) and (e)(1) Requirements of Rule 1150.1

1.1 Subsurface Probe Design and Installation

Landfills which are subject to Rule 1150.1 must install and maintain a subsurface refuse boundary probe sampling system of adequate design to determine if gas migration exists for the ultimate purpose of preventing surface emissions. The California Integrated Waste Management Board also requires the installation of refuse boundary probes for purposes of detecting and ultimately preventing subsurface migration of landfill gas past the permitted property boundary of the landfill/disposal site as well as the prevention of the accumulation of landfill gas in on-site structures. It is the District's intent that the subsurface refuse boundary probes required by paragraph (d)(3) of Rule 1150.1 be designed and installed in such a manner as to comply with the requirements of the California Integrated Waste Management Board (whenever possible) and Sections 1.1.1 through 1.1.4.

1.1.1 The probes shall be installed within the landfill property line and outside the refuse disposal area.

1.1.2 Wherever accessible, the probes shall be located no further than 100 feet from the refuse boundary.

**ALTERNATIVE: WHEREVER ACCESSIBLE AND THE PROBES ARE GREATER THAN 100 FEET FROM THE REFUSE, MONITOR INSTANTANEOUSLY FROM THE REFUSE BOUNDARY TO THE PROBE, USING THE GRID METHOD EVERY QUARTER AND WHEN PROBES EXCEED 2% TOC.**

1.1.3 The spacing between probes shall be based on the adjacent land use no further than 1320 feet (1/4 mile) from the refuse boundary and shall be determined as follows:

LAND USE	SPACING
Residential/Commercial	100 feet
Public Access	500 feet
Undeveloped Open Space, (No Public Access)	650 feet
Landfill with Liners	1000 feet

1.1.4 Each probe shall be capped, sealed, have a sampling valve and be of multiple-depth design for which the depth shall be determined based on the depth of refuse no further than 500 feet from the probe as follows:

- |              |  |
|--------------|--|
| First Depth  | 10 feet below surface.   |
| Second Depth | 25% of refuse depth or 25 feet below surface, whichever is deeper. |
| Third Depth  | 50% of refuse depth or 50 feet below surface, whichever is deeper. |
| Fourth Depth | 75% of refuse depth or 75 feet below surface, whichever is deeper. |

Second, third, or fourth depth probes may be deleted if the required depth of such probe is deeper than the depth of the refuse.

1.2 Number of Samples

All refuse boundary gas probes at each depth shall be monitored monthly for TOC measured as methane using a portable flame ionization detector (FID) meeting the requirements of Section 3.2 and with a tube connected to the probe sampling valve. In addition, samples shall be taken as specified in Section 1.2.1 or 1.2.2 to determine the concentration of both TOC and TAC. The Executive Officer may require additional probes to be sampled upon written request.

- 1.2.1 If the TOC concentration measured with the FID does not exceed 5% by volume in any of the probes, collect one bag sample from one probe with the highest concentration, or
- 1.2.2 If the TOC concentration measured with the FID for any of the probes exceeds 5% by volume, collect one bag sample per probe from the probes with the highest concentrations above 5% by volume, from at least five probes.

1.3 Subsurface Refuse Boundary Probe Sampling Procedure

- 1.3.1 Prior to collecting gas samples, evacuate the probe (the probes must be sealed during evacuation) until the TOC concentration remains constant for at least 30 seconds.
- 1.3.2 The constant TOC concentration shall be measured using an FID that meets the requirements in Section 3.2.

**ALTERNATIVE: PORTABLE ANALYZERS ON AN APPROVED LIST OF EQUIPMENT MAINTAINED BY THE AQMD MAY BE**

**USED AS ALTERNATIVES FOR THE SAMPLER/INSTRUMENT  
REQUIREMENTS OF THIS RULE.**

1.3.3 Collect approximately a 10-liter gas sample in a Tedlar (Dupont trade name for polyvinyl) bag or equivalent container over a continuous ten-minute period using the evacuated container sampling procedure described in Section 7.1.1 of EPA Method 18 or direct pump sampling procedure described in Section 7.1.2 of EPA Method 18. The container shall be LIGHT-SEALED.

**ALTERNATIVE: SUMMA-CANNISTERS MAY BE  
SUBSTITUTED FOR THE 10-LITER TEDLAR BAG**

1.4 Subsurface Refuse Boundary Probe Analytical Procedures

All samples collected shall be analyzed no later than 72 hours after collection for TOC using U.S. EPA Method 25, 40 CFR, Part 60, Appendix A analysis or a portable FID that meets the requirements in Section 3.2 and for the TAC specified in Table 1 and upon written request, Table II, using U.S. EPA Compendium Method TO-14.

1.5 Chain of Custody (Required for samples sent to the lab)

A custody sheet shall accompany the bag samples. Each time a bag changes hands, it shall be logged on the custody sheet with the time of custody transfer recorded. Laboratory personnel shall record the condition of the sample (full, three-fourths full, one-half full, one-fourth full, or empty). An example of a custody sheet is shown in Figure 4.

1.6 Recording the Results

1.6.1 Record the volume concentration of TOC measured as methane for each individually identified refuse boundary probe (at each depth) and the volume concentration of TAC for selected probes on a quality control sheet as shown in Figure 3. Include a topographic map drawn to scale with the location of both the refuse boundary probes and the gas collection system clearly marked and identified.

1.6.2 Maintain and submit the results as specified in subdivision (f) of Rule 1150.1.

**2.0 INTEGRATED LANDFILL SURFACE SAMPLING**

**Paragraph (d)(5) and (e)(2) Requirements of Rule 1150.1**

2.1 Number of Samples

The number of samples collected will depend on the area of the landfill surface. The entire landfill disposal area shall be divided into individually identified 50,000 square foot grids. One monthly sample shall be collected from each grid for analysis. Any area that the Executive Officer deems inaccessible or dangerous for a technician to enter may be excluded from the sampling grids monitored by the landfill owner or operator. To exclude an area from monitoring, the landfill owner or operator shall file a written request with the Executive Officer. Such a request shall include an explanation of the requested exclusion and photographs of the area. The Executive Officer shall notify the landfill owner or operator in writing of the decision. Any exclusion granted shall apply only to the monitoring requirement. The 50 ppmv limit specified in paragraph (d)(5) of Rule 1150.1 applies to all areas.

2.2 Integrated Surface Sampling Conditions

2.2.1. The average wind speed during this sampling procedure shall be five miles per hour or less. Surface sampling shall be terminated when the average wind speed exceeds five miles per hour or the instantaneous wind speed exceeds ten miles per hour. Average wind speed is determined on a 15-minute average.

2.2.2. Surface sampling shall be conducted when the landfill is dry. The landfill is considered dry when there has been no measurable precipitation for the preceding 72 hours prior to sampling. Most major newspapers report the amount of precipitation that has fallen in a 24-hour period throughout the Southern California area. Select the nearest reporting station that represents the landfill location or provide for measurable precipitation collection at the MSW landfill wind monitoring station.

2.3 Integrated Surface Sampler Equipment Description

An integrated surface sampler is a portable self-contained unit with its own internal power source. The integrated sampler consists of a stainless steel collection probe, a rotameter, a pump, and a 10-liter Tedlar bag enclosed in a LIGHT-SEALED CONTAINER to prevent photochemical reactions from occurring during sampling and transportation. The physical layout of the sampler is shown in Figure 1.

An alternate integrated surface sampler may be used, provided that the landfill owner or operator can show an equivalency with the sampler specifications in Section 2.4 and shown in Figure 1. All alternatives shall be submitted as specified in subdivision (i) of Rule 1150.1.

2.4 Integrated Surface Sampler Equipment Specifications

- 2.4.1 Power: Batteries or any other power source.
- 2.4.2 Pump: The diaphragm shall be made of non-lubricated Viton (Dupont trade name for co-polymer of hexafluoropropylene and vinylidene fluoride) rubber.
- 2.4.3 Bag: One 10-liter Tedlar bag with a valve. The Tedlar bag shall be contained in a LIGHT-SEALED CONTAINER. The valve shall be leak free and constructed of aluminum, stainless steel, or non-reactive plastic with a Viton or Buna-N (butadiene acrylonitrile co-polymer) o-ring seal.
- 2.4.4 Rotameter: The rotameter shall be made of borosilicate glass or other non-reactive material and have a flow range of approximately 0-to-1 liter per minute. The scale shall be in milliliters or an equivalent unit. The graduations shall be spaced to facilitate accurate flow readings.
- 2.4.5 Air Flow Control Orifice: Needle valve in the rotameter.
- 2.4.6 Funnel: 316 stainless steel.
- 2.4.7 Fittings, Tubing and Connectors: 316 stainless steel or Teflon.

2.5 Integrated Surface Sampling Procedure

- 2.5.1 An integrated surface sampler as described in Section 2.4 shall be used to collect a surface sample approximately 8-to-10 liters from each grid.
- 2.5.2 During sampling, the probe shall be placed 0-to-3 inches above the landfill surface.
- 2.5.3 The sampler shall be set at a flow rate of approximately 333 cubic centimeters per minute
- 2.5.4 Walk through a course of approximately 2,600 linear feet over a continuous 25-minute period. Figure 2 shows a walk pattern for the 50,000 square foot grid.

**ALTERNATIVE: ROUTE MONITORING IS APPROVED AS AN ALTERNATIVE FOR THE INTEGRATED SURFACE SAMPLING PROCEDURE WITH THE FOLLOWING CONDITIONS:**

A. A TOPOGRAPHICAL MAP, SHOWING ALL ROUTES WITHIN EACH 50,000 SQUARE FOOT GRID AND THE COLLECTION SYSTEM LAYOUT, SHALL BE SUBMITTED TO THE AQMD WITHIN 30 DAYS OF APPROVAL OF THIS PLAN. THE TOPOGRAPHIC MAP DATED 5/25/00 OR THE MOST RECENT UPDATE, WITH SHEET TITLES "BKK CLASS III LANDFILL AQMD RULE 1150.1 GRIDS AND ROUTES" HAS BEEN APPROVED.

B. EACH GRID SHALL HAVE FOUR DIFFERENT ROUTES BETWEEN 100 AND 250 FEET LONG. ESTABLISH A SAMPLING SEQUENCE FOR THE FOUR ROUTES WITHIN EACH GRID. PERFORM SAMPLING OVER ONE ROUTE EACH FREQUENCY SPECIFIED UNDER (E)(2) UNTIL ALL THE GRIDS ON THE LANDFILL SURFACE HAVE BEEN SAMPLED. FOLLOW THE SAMPLING SEQUENCE UNTIL ALL FOUR ROUTES WITHIN EACH GRID HAVE BEEN COMPLETED. AFTER THE FOUR ROUTES HAVE BEEN SAMPLED, SUBSEQUENT SAMPLING OF THE GRID SHALL FOLLOW THE SAME ROUTE SEQUENCE EXCEPT WHEN MEETING FOLLOW-UP COMPLIANCE FOR (E)(2) EXCEEDANCES.

C. EACH ROUTE SHALL BE WALKED, AT A MINIMUM, OVER A CONSECUTIVE 2 ½-MINUTE PERIOD.

D. IF THE INTEGRATED MONITORING RESULTS IN A READING EQUAL TO OR GREATER THAN 35 PPM WITHIN A GIVEN GRID, THEN INSTANTANEOUS MONITORING SHALL BE CONDUCTED TO FIND THE AREAS OF HIGH EMISSIONS. REPAIRS SHALL BE MADE WHERE EMISSIONS ARE FOUND TO BE GREATER THAN 500 PPM.

2.6 Integrated Surface Sample Analytical Procedures

All samples collected shall be analyzed no later than 72 hours after collection for TOC using U.S. EPA Method 25, 40 CFR, Part 60, Appendix A analysis or a portable FID that meets the requirements in Section 3.2. In addition, the samples specified in Section 2.6.1 or 2.6.2 must be analyzed no later than 72 hours after

collection for the TAC specified in Table 1 and upon written request, Table II, using U.S. EPA Compendium Method TO-14.

2.6.1 Ten percent of all samples which have a concentration of TOC greater than 50 ppmv as methane, or

2.6.2 Two samples if all samples are 50 ppmv or less of TOC or two samples if there are less than 20 samples above 50 ppmv.

The Executive Officer may require more samples to be tested for TAC if he determines there is a potential nuisance or public health problem.

2.7 Chain of Custody (Required for samples sent to the lab)

A custody sheet shall accompany the bag samples. Each time a bag changes hands, it shall be logged on the custody sheet with the time of custody transfer recorded. Laboratory personnel shall record the condition of the sample (full, three-fourths full, one-half full, one-fourth full, or empty). An example of a custody sheet is shown in Figure 4.

2.8 Recording the Results

2.8.1 Record the volume concentration of both TOC measured as methane for each grid and the volume concentration for the required TAC on a quality control sheet as shown in Figure 3. Include a topographic map drawn to scale with the location of the grids and the gas collection system clearly marked and identified.

2.8.2 Record the wind speed during the sampling period using the wind speed and direction monitoring system required in paragraph (d)(9) of Rule 1150.1.

2.8.3 Maintain and submit the results as specified in subdivision (f) of Rule 1150.1.

3.0 INSTANTANEOUS LANDFILL SURFACE MONITORING  
Subparagraph (d)(6) and (e)(3) Requirements of Rule 1150.1

3.1 Monitoring Area

The entire landfill disposal area shall be monitored once each calendar quarter. Any area of the landfill that the Executive Officer deems as inaccessible or dangerous for a technician to enter may be excluded from the area to be monitored by the landfill owner or operator. To exclude an area from monitoring, the landfill owner or operator shall file a petition with the Executive Officer. Such a

request shall include an explanation of why the area should be excluded and photographs of the area. Any excluded area granted shall only apply to the monitoring requirement. The 500 ppmv limit specified in paragraph (d)(6) of Rule 1150.1 applies to all areas.

**ALTERNATIVE: SHADED PORTIONS OF GRIDS AS REFERENCED IN THE TOPOGRAPHIC MAPS SUBMITTED 5/25/00 OR THE MOST RECENT UPDATE, WITH SHEET TITLE "BKK CLASS III LANDFILL AQMD RULE 1150.1 GRIDS AND ROUTES" AND "BKK CLASS III LANDFILL AQMD RULE 1150.1 GAS WELLS AND GRIDS" SHALL BE MONITORED AS FOLLOWS: INCLUDE BENCHES, DRAINAGE CULVERTS, SLOPES LESS THAN 30 DEGREES AND FOR THOSE PORTIONS OF SLOPES GREATER THAN 30 DEGREES EXTEND THE MONITORING DEVICE PROBE OVER THE SLOPE AS FAR AS PRACTICAL TO COVER AS MUCH OF THE SLOPE AS POSSIBLE. LARGE CLUMPS OF PAMPAS GRASS AND DENSE PERENNIAL VEGETATION (NOT ANNUAL WEEDS) MAY BE EXCLUDED FROM MONITORING. FOR THOSE SHADED PORTIONS OF GRIDS WITH INTERIM COVER, THIS ALTERNATIVE SHALL ONLY APPLY UNTIL CIWMB ACKNOWLEDGES THE FINAL COVER HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THE APPROVED CLOSURE DESIGN. THE TOPOGRAPHIC MAPS SHALL BE DRAWN TO SCALE CLEARLY IDENTIFYING TOPOGRAPHICAL FEATURES OF THE LANDFILL WITH CONTOUR LINES. THE LOCATION OF ALL MONITORING GRIDS AND THE GAS COLLECTION SYSTEM SHALL BE CLEARLY MARKED AND IDENTIFIED. THE SUBMITTED TOPOGRAPHICAL MAPS WILL BE FILED IN THE APPLICATION FOLDER AND USED FOR COMPLIANCE. SMALLER 11" BY 17" TOPOGRAPHICAL MAPS ARE ATTACHED TO THIS PLAN FOR FIELD REFERENCE. VACUUM READINGS FROM ALL GAS EXTRACTION WELLS LOCATED ON GRIDS WITH SHADED PORTIONS, SHALL BE RECORDED MONTHLY AND INCLUDED IN THE QUARTERLY REPORT.**

**IN ADDITION, MONITORING IS NOT REQUIRED FOR THE FOLLOWING LANDFILL SURFACES: PORTIONS OF SLOPES 30**

**DEGREES AND GREATER (EXCEPT FOR THE EXCLUSION OF THE MONITORING DEVICE PROBE ABOVE), AND PAVED SURFACES EXCEPT FOR CRACKS.**

**3.2 Equipment Description and Specifications**

A portable FID shall be used to instantaneously measure the concentration of TOC measured as methane at any location on the landfill. The FID shall meet the specifications listed in Sections 3.2.1 through 3.2.4 and shall be kept in good operating condition.

3.2.1 The portable analyzer shall meet the instrument specifications provided in Section 3 of U.S. EPA Method 21, except that:

3.2.1.1 "Methane" shall replace all references to VOC.

3.2.1.2 A response time of 15 seconds or shorter shall be used instead of 30 seconds.

3.2.1.3 A precision of 3% or better shall be used instead of 10%.  
In addition the instrument shall meet the specifications in Sections 3.2.1.4 through 3.2.1.6.

3.2.1.4 A minimum detectable limit of 5 ppmv (or lower).

3.2.1.5 A flame-out indicator, audible and visual.

3.2.1.6 Operate at an ambient temperature of 0 - 50° C.

3.2.2 The calibration gas shall be methane, diluted to a nominal concentration of 10,000 ppmv in air for subsurface refuse boundary probe monitoring and sample analysis to comply with paragraph (e)(1) of Rule 1150.1, 50 ppmv in air for integrated sample analyses to comply with paragraph (e)(2) of Rule 1150.1 and 500 ppmv in air for instantaneous monitoring to comply with paragraph (e)(3) of Rule 1150.1.

3.2.3 To meet the performance evaluation requirements in Section 3.1.3 of U.S. EPA Method 21, the instrument evaluation procedures of Section 4.4 of U.S. EPA Method 21 shall be used.

3.2.4 The calibration procedures provided in Section 4.2 of U.S. EPA Method 21 shall be followed at the beginning of each day before commencing a surface monitoring survey.

**3.3 Monitoring Procedures**

- 3.3.1 The owner or operator shall monitor the landfill disposal area for TOC measured as methane using the described portable equipment.
  - 3.3.2 The sampling probe shall be placed at a distance of 0-3 inches above any location of the landfill to take the readings.
  - 3.3.3 At a minimum, an individually identified 50,000 square foot grid shall be used and a walk pattern as illustrated in Figure 2 shall be implemented including areas where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover.
- 3.4 Recording the Results
- 3.4.1 Record the location and concentration of TOC measured as methane for any instantaneous reading of 500 ppmv or greater on a topographic map of the landfill, drawn to scale with the location of both the grids and the gas collection system clearly marked and identified.
  - 3.4.2 Maintain and submit the results as specified in subdivision (f) of Rule 1150.1.
- 4.0 **LANDFILL GAS SAMPLE FROM GAS COLLECTION SYSTEM**  
**Subparagraph (e)(4) Requirement of Rule 1150.1**
- 4.1 **Number of Samples**  
Collect one monthly sample of landfill gas for analysis from the main gas collection header line entering the gas treatment and/or gas control system(s).
- 4.2 **Sampling Procedure**  
Collect approximately a 10-liter sample in a Tedlar bag or equivalent container over a continuous ten-minute period.
- 4.3 **Analytical Procedures**  
Samples collected shall be analyzed no later than 72 hours after collection for TOC using U.S. EPA Method 25, 40 CFR, Part 60, Appendix A analysis and for the TAC specified in Table 1 and upon written request, Table II, using U.S. EPA Compendium Method TO-14.
- 4.4 **Chain of Custody (Required for samples sent to the lab)**  
A custody sheet shall accompany the bag samples. Each time a bag changes hands, it shall be logged on the custody sheet with the time of custody transfer recorded. Laboratory personnel shall record the condition of the sample (full,

three-fourths full, one-half full, one-fourth full, or empty). An example of a custody sheet is shown in Figure 4.

4.5 Recording the Results

4.5.1 Record the volume concentration of both TOC measured as methane and the volume concentration for the required TAC on a quality control sheet as shown in Figure 3. Include a topographic map drawn to scale with the location of the gas collection and control system clearly marked and identified.

4.5.2 Maintain and submit the results as specified in subdivision (f) of Rule 1150.1.

**5.0 AMBIENT AIR SAMPLES AT THE LANDFILL PROPERTY BOUNDARY**

**Subparagraph (e)(5) Requirement of Rule 1150.1**

5.1 Number of Samples

Monthly ambient air samples shall be collected for analysis at the landfill property boundary from both an upwind and downwind sampler sited to provide good meteorological exposure to the predominant offshore (drainage land breeze) and onshore (sea breeze) wind flow patterns. The upwind and downwind samples shall be collected simultaneously over two 12 hour periods beginning between 9:00 a.m. and 10:00 a.m., and 9:00 p.m. and 10:00 p.m. on the same day or different days.

**ALTERNATIVE: AMBIENT AIR SAMPLES SHALL BE COLLECTED FOR ANALYSIS AND SITED AT THE MICROWAVE TOWER AND THE AZUSA SPILLWAY TO PROVIDE GOOD METEOROLOGICAL EXPOSURE TO THE PREDOMINANT OFFSHORE (DRAINAGE LAND BREEZE) AND ONSHORE (SEA BREEZE) WIND FLOW PATTERNS. THE UPWIND AND DOWNWIND SAMPLES SHALL BE COLLECTED SIMULTANEOUSLY OVER TWO 12 HOUR PERIODS BEGINNING BETWEEN 9:00 A.M. AND 10:00 A.M., AND 9:00 P.M. AND 10:00 P.M. ON THE SAME DAY OR DIFFERENT DAYS.**

5.2 Ambient Air Sampling Conditions

Ambient air sampling shall be conducted on days when stable (offshore drainage) and unstable (onshore sea breeze) meteorological conditions are representative for

the season. Preferable sampling conditions are characterized by the following meteorological conditions:

- 5.2.1 Clear cool nights with wind speeds of two miles per hour or less, and
- 5.2.2 Onshore sea breezes with wind speeds ten miles per hour or less.

No sampling will be conducted if the following adverse meteorological conditions exist:

- 5.2.3 Rain,
- 5.2.4 Average wind speeds greater than 15 miles per hour for any 30-minute period, or
- 5.2.5 Instantaneous wind speeds greater than 25 miles per hour.

Continuously recorded on-site wind speed and direction measurements required in paragraph (d)(9) of Rule 1150.1 will characterize the micrometeorology of the site and serve to verify that the meteorological criteria have been met during sampling.

### 5.3 Ambient Air Sampler Equipment Description

An ambient air sampling unit consists of a 10-liter Tedlar bag, a DC-operated pump, stainless steel capillary tubing to control the sample rate to the bag, a bypass valve to control the sample flow rate (and minimize back pressure on the pump), a Rotameter for flow indication to aid in setting the flow, a 24-hour clock timer to shut off the sampler at the end of the 24-hour sampling period, and associated tubing and connections (made of stainless steel, Teflon, or borosilicate glass to minimize contamination and reactivity). The physical layout of the sampler is shown in Figure 5.

An alternate ambient air sampler may be used, provided that the landfill owner or operator can show an equivalency with the sampler specifications in Section 5.3 and shown in Figure 5. All alternatives shall be submitted as specified in subdivision (i) of Rule 1150.1.

### 5.4 Ambient Air Sampler Equipment Specifications

The equipment used when conducting air samples at any landfill property boundary shall meet the following specifications:

- 5.4.1 Power: one 12V DC marine battery. The marine battery provides 12V DC to the pump and the clock.

5.4.2 Pump: one 12V DC pump. The diaphragm shall be made of non-lubricated Viton rubber. The maximum pump unloaded flow rate shall be 4.5 liters per minute.

5.4.3 Bag: One 10-liter Tedlar bag with a valve. The Tedlar bag shall be enclosed in a LIGHT-SEALED CONTAINER. The valve is a push-pull type constructed of aluminum and stainless steel, with a Viton or Buna-N (butadiene acrylonitrile co-polymer) o-ring seal.

**ALTERNATIVE: SUMMA-CANISTERS**

5.4.4 Rotameter - made of borosilicate glass and has a flow range of 3-to-50 cubic centimeters per minute. The scale is in millimeters (mm) with major graduations (labeled) every 5 mm and minor graduations every 1 mm.

5.4.5 Air flow control orifice: 316 stainless steel capillary tubing.

5.4.6 Bypass valve.

5.4.7 Fittings, tubing, and connectors -- 315 stainless steel or Teflon.

5.4.8 Clock timer with an accuracy of better than 1%.

**5.5. Ambient Air Sample Analytical Procedures**

Samples collected must be analyzed no later than 72 hours after collection for TOC using U.S. EPA Method 25, 40 CFR, Part 60, Appendix A analysis or a portable FID that meets the requirements in Section 3.2 and for the TAC specified in Table 1 and upon written request, Table II, using U.S. EPA Compendium Method TO-14.

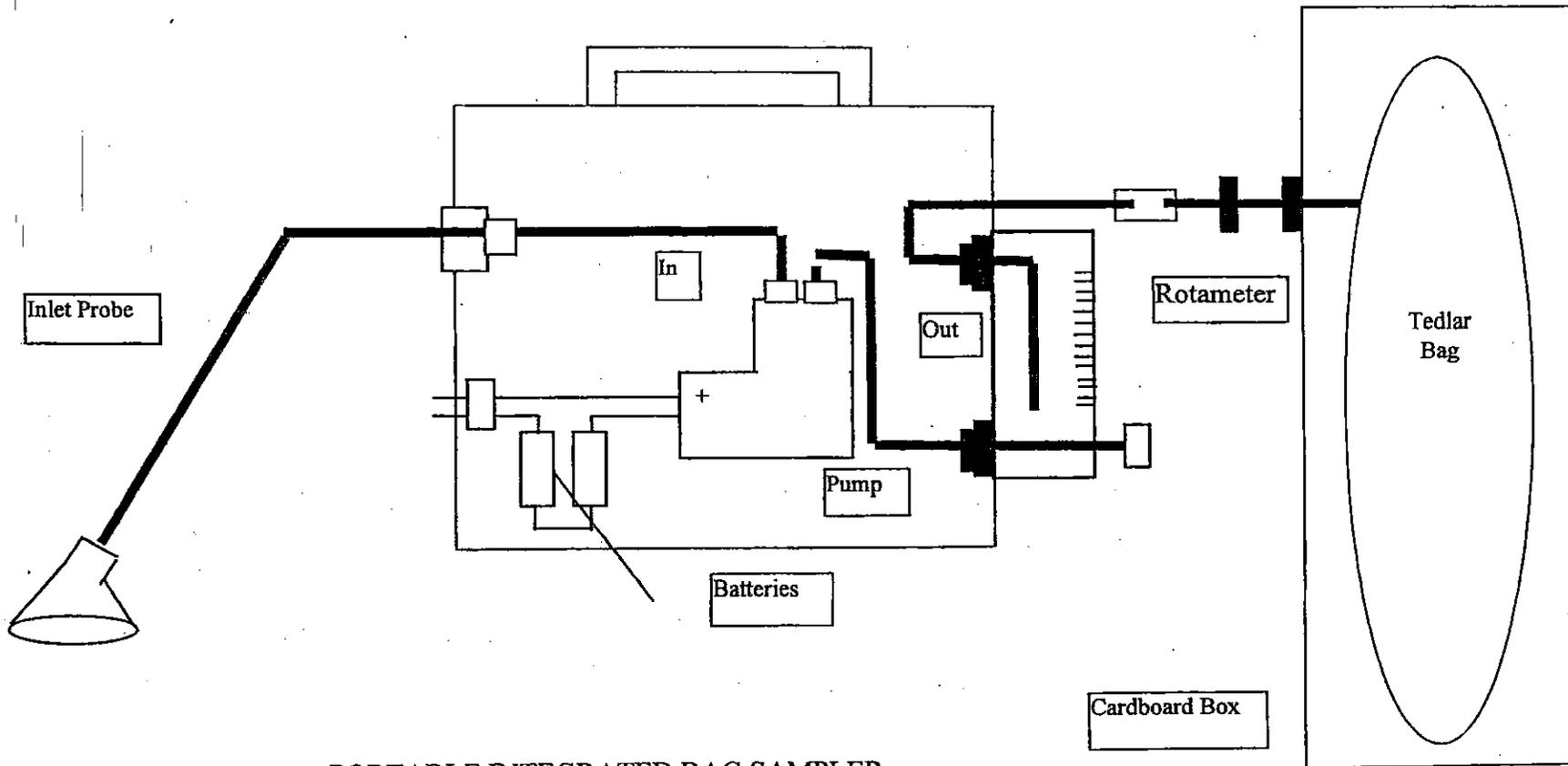
**5.6 Chain of Custody (Required for samples sent to the lab)**

A custody sheet shall accompany the bag samples. Each time a bag changes hands, it shall be logged on the custody sheet with the time of custody transfer recorded. Laboratory personnel shall record the condition of the sample (full, three-fourths full, one-half full, one-fourth full, or empty). An example of a custody sheet is shown in Figure 4.

**5.7 Recording the Results**

5.7.1 Record the volume concentration of TOC measured as methane and the volume concentration of TAC for each sample on a quality control sheet as shown in Figure 3. Include a topographic map drawn to scale with the location of both the upwind and downwind samplers and the gas collection and control system clearly marked and identified.

- 5.7.2 Record the wind speed and direction during the 24-hour sampling period using the wind speed and direction monitoring system required in paragraph (d)(9) of Rule 1150.1.
- 5.7.3 Maintain and submit the results as specified in subdivision (f) of Rule 1150.1.



PORTABLE INTEGRATED BAG SAMPLER  
Physical Layout

Figure 1

Typical Landfill Walk Pattern  
for a 50,000 Square Foot Grid

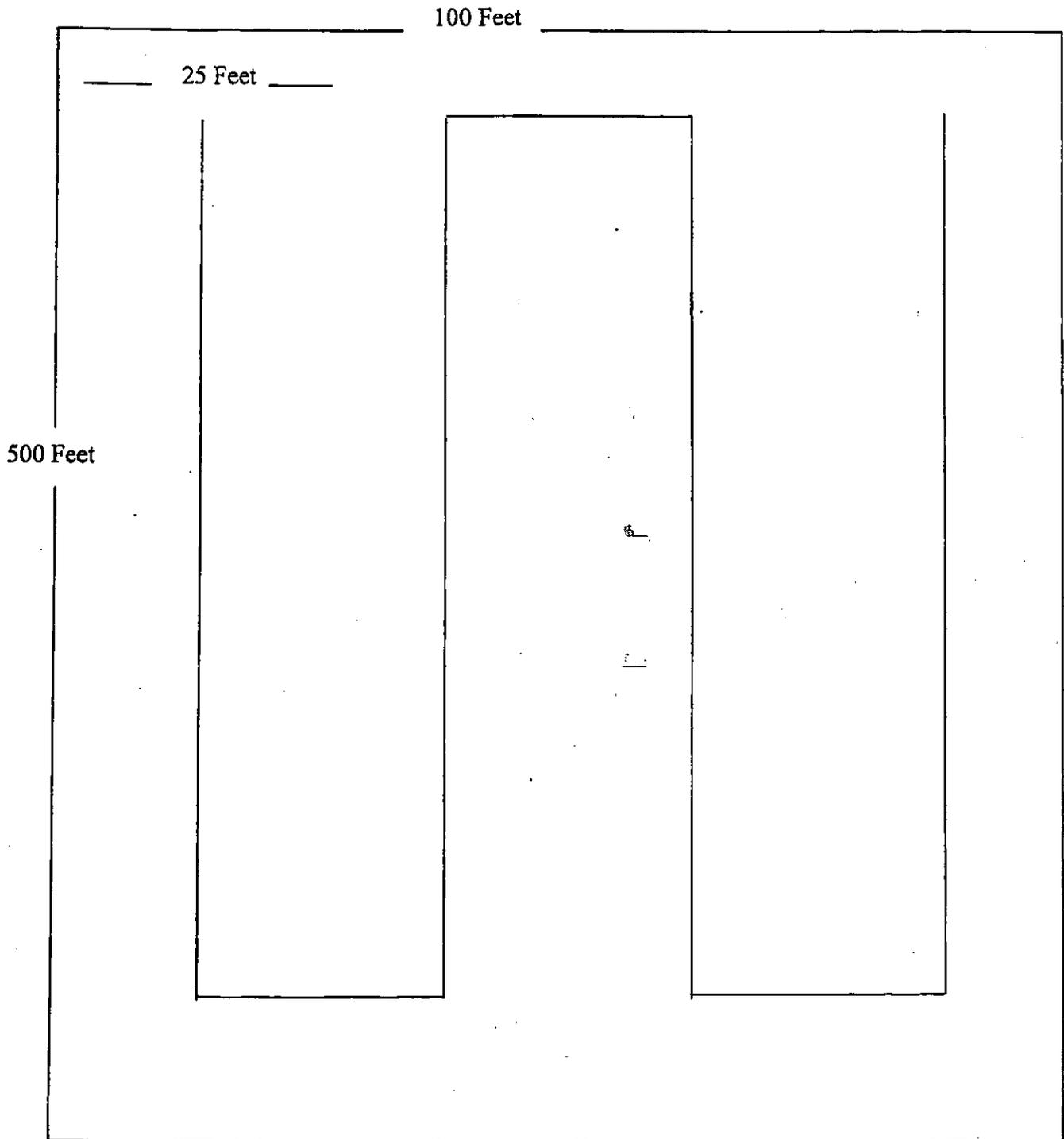


Figure 2



**BAG SAMPLE CUSTODY FORM**

Project \_\_\_\_\_

Date: \_\_\_\_\_

Bag (I.D. #)									
Condition Received in Lab*									

Bags Prepared By: \_\_\_\_\_ Time: \_\_\_\_\_  
Date: \_\_\_\_\_

Bags Taken Out By: \_\_\_\_\_ Time: \_\_\_\_\_

Bags Taken to Lab By \_\_\_\_\_

Bags Received In Lab By: \_\_\_\_\_ Time \_\_\_\_\_

\* F = 1/2 full to full, O = Overfull (Bulging), L = 1/4 to 1/2 full,  
E = Less than 1/4 full but contains some sample, N = No sample at all.

**Figure 4**

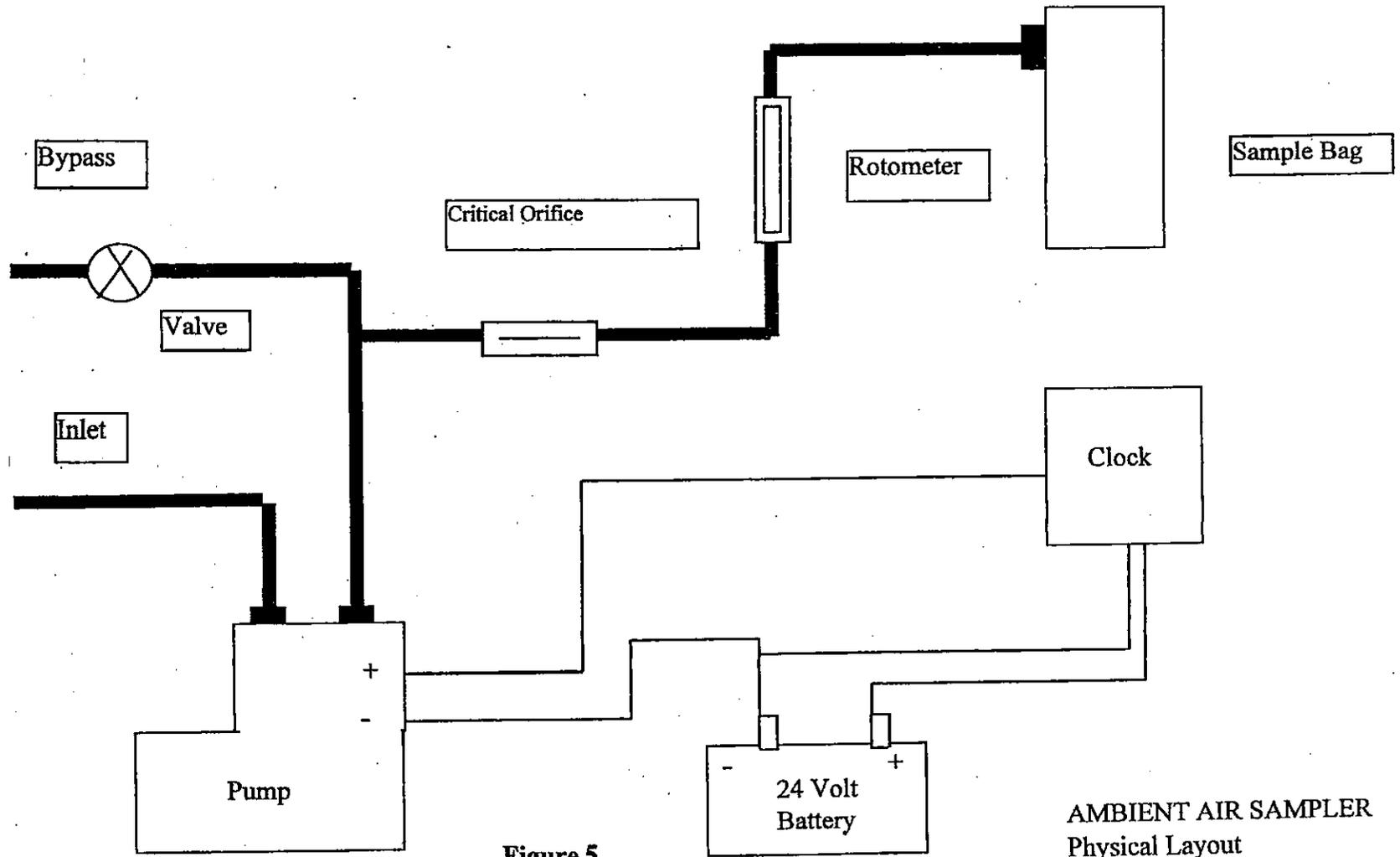


Figure 5

AMBIENT AIR SAMPLER  
Physical Layout

TABLE 1 - CARCINOGENIC AND TOXIC AIR CONTAMINANTS  
(Core Group)

Paragraph (e)(2), Subparagraphs (k)(3)(F) and (k)(3)(G) Requirements of  
Rule 1150.1

1.	Benzene	$C_6H_6$
2.	Benzyl Chloride	$C_6H_5H_2Cl$
3.	Chlorobenzene	$C_6H_5Cl$
4.	1,2 Dibromoethane (Ethylene Dibromide)	$BrCH_2CH_2Br$
5.	Dichlorobenzene	$C_6H_4Cl_2$
6.	1,1 Dichloroethane (Ethylidene Chloride)	$CH_3CHCl_2$
7.	1,2 Dichloroethane (Ethylene Dichloride)	$ClH_2H_2Cl$
8.	1,1 Dichloroethene (Vinylidene Chloride)	$CH_2 : CCl_2$
9.	Dichloromethane (Methylene Chloride)	$CH_2Cl_2$
10.	Hydrogen Sulfide	$H_2S$
11.	Tetrachloroethylene (Perchloroethylene)	$Cl_2C : CCl_2$
12.	Tetrachloromethane (Carbon Tetrachloride)	$CCl_4$
13.	Toluene	$C_6H_5CH_3$
14.	1,1,1 Trichloroethane (Methyl Chloroform)	$CH_3CCl_3$
15.	Trichloroethylene	$CHCl : CCl_2$
16.	Trichloromethane (Chloroform)	$CHCl_3$
17.	Vinyl Chloride	$CH_2 : CHCl$
18.	Xylene	$C_6H_4(CH_3)_2$

**TABLE 2 - CARCINOGENIC AND TOXIC AIR CONTAMINANTS  
(Supplemental Group)**

**Paragraph (e)(2), Subparagraphs (k)(3)(F) and (k)(3)(G) Requirements of  
Rule 1150.1**

1.	Acetaldehyde	CH3CHO
2.	Acrolein	CH2CHCHO
3.	Acrylonitrile	H2C : CHCN
4.	Allyl Chloride	H2C : CHCH2Cl
5.	Bromomethane (Methyl Bromide)	CH3Br
6.	Chlorinated Phenols	
7.	Chloroprene	H2C : CHCCl : CH2
8.	Cresol	CH3C6H4OH
9.	Dialkyl Nitrosamines	
10.	1,4 - Dioxane	OCH2CH2OCH2CH2
11.	Epichlorohydrin	CH2OCHCH2Cl
12.	Ethylene Oxide	CH2CH2O
13.	Formaldehyde	HCHO
14.	Hexachlorocyclopentadiene	C5Cl6
15.	Nitrobenzene	C6H5NO2
16.	Phenol	C6H5OH
17.	Phosgene	COCl2
18.	Polychlorinated Dibenzo-P-Dioxin	
19.	Polychlorinated Dibenzo Furan	
20.	Polychlorinated Biphenols	
21.	Polynuclear Aromatic Hydrocarbons	
22.	Propylene Oxide	CH2-CH-CH3
23.	Tetrahydrothiophene	CH2CH2CH2CH2S
24.	Thiophene	CHCHCHCHS

## Attachment B

### TITLE 27. Environmental Protection

#### Division 2. Solid Waste

#### Subdivision 1. Consolidated Regulations for Treatment, Storage, Processing or Disposal of Solid

### Chapter 3. Criteria for All Waste Management Units, Facilities, and Disposal Sites

#### Subchapter S. Closure and Post-Closure Maintenance

### Article 2. Closure and Post-Closure Maintenance Standards for Disposal Sites and Landfills

#### §21140. Section CIWMB -- Final Cover. (TI4:§17773)

- (a) The final cover shall function with minimum maintenance and provide waste containment to protect public health and safety by controlling at a minimum, vectors, fire, odor, litter and landfill gas migration. The final cover shall also be compatible with postclosure land use.
- (b) In proposing a final cover design meeting the requirements under §21090, the owner or operator shall assure that the proposal meets the requirements of this section. Alternative final cover designs shall meet the performance requirements of ¶(a) and, for MSWLF units, 40 CFR 258.60(b); shall be approved by the enforcement agency for aspects of ¶(a).
- (c) The EA may require additional thickness, quality, and type of final cover depending on, but not limited to the following:
- (1) a need to control landfill gas emissions and fires;
  - (2) the future reuse of the site; and
  - (3) provide access to all areas of the site as needed for inspection of monitoring and control facilities, etc.

#### NOTE

Authority cited: Sections 40502 and 43020, Public Resources Code; and Section 66796.22 (d), Government Code. Reference: Sections 43021 and 43103, Public Resources Code; and Section 66796.22(d), Government Code.

#### HISTORY

1. New section filed 6-18-97; operative 7-18-97 (Register 97, No. 25).

## Attachment C

### TITLE 27. Environmental Protection

#### Division 2. Solid Waste

#### Subdivision 1. Consolidated Regulations for Treatment, Storage, Processing or Disposal of Solid

#### Chapter 3. Criteria for All Waste Management Units, Facilities, and Disposal Sites

#### Subchapter 2. Siting and Design

#### Article 2. SWRCB -- Waste Classification and Management

#### §20200. SWRCB -- Applicability and Classification Criteria. (C15: §2520)

(a) Concept--This article contains a waste classification system which applies to solid wastes that cannot be discharged directly or indirectly to waters of the state and which therefore must be discharged to waste management units (Units) for treatment, storage, or disposal in accordance with the requirements of this division. Wastes which can be discharged directly or indirectly (*e.g., by percolation*) to waters of the state under effluent or concentration limits that implement applicable water quality control plans (*e.g., municipal or industrial effluent or process wastewater*) are not subject to the SWRCB-promulgated provisions of this division. This waste classification system shall provide the basis for determining which wastes may be discharged at each class of Unit. Waste classifications are based on an assessment of the potential risk of water quality degradation associated with each category of waste.

(1) The waste classifications in this article shall determine where the waste can be discharged unless the waste does not consist of or contain municipal solid waste (MSW) and the discharger establishes to the satisfaction of the RWQCB that a particular waste constituent or combination of constituents presents a lower risk of water quality degradation than indicated by classification according to this article.

(2) Discharges of wastes identified in §20210 or §20220 of this article shall be permitted only at Units which have been approved and classified by the RWQCB in accordance with the criteria established in Article 3 of this subchapter, and for which WDRs have been prescribed or waived pursuant to Article 4, Subchapter 3, Chapter 4 of this subdivision (§21710 et seq.). Table 2.1 (of this article) presents a summary of discharge options for each waste category.

(b) Dedicated Units/Cells For Certain Wastes--The following wastes shall be discharged only at dedicated Units [or dedicated landfill cells (*e.g., ash monofill cell*)] which are designed and constructed to contain such wastes:

(1) wastes which cause corrosion or decay, or otherwise reduce or impair the integrity of containment structures;

(2) wastes which, if mixed or commingled with other wastes can produce a violent reaction (including heat, pressure, fire or explosion), can produce toxic byproducts, or can produce any reaction product(s) which:

(A) requires a higher level of containment;

(B) is a restricted waste; or

(C) impairs the integrity of containment structures.

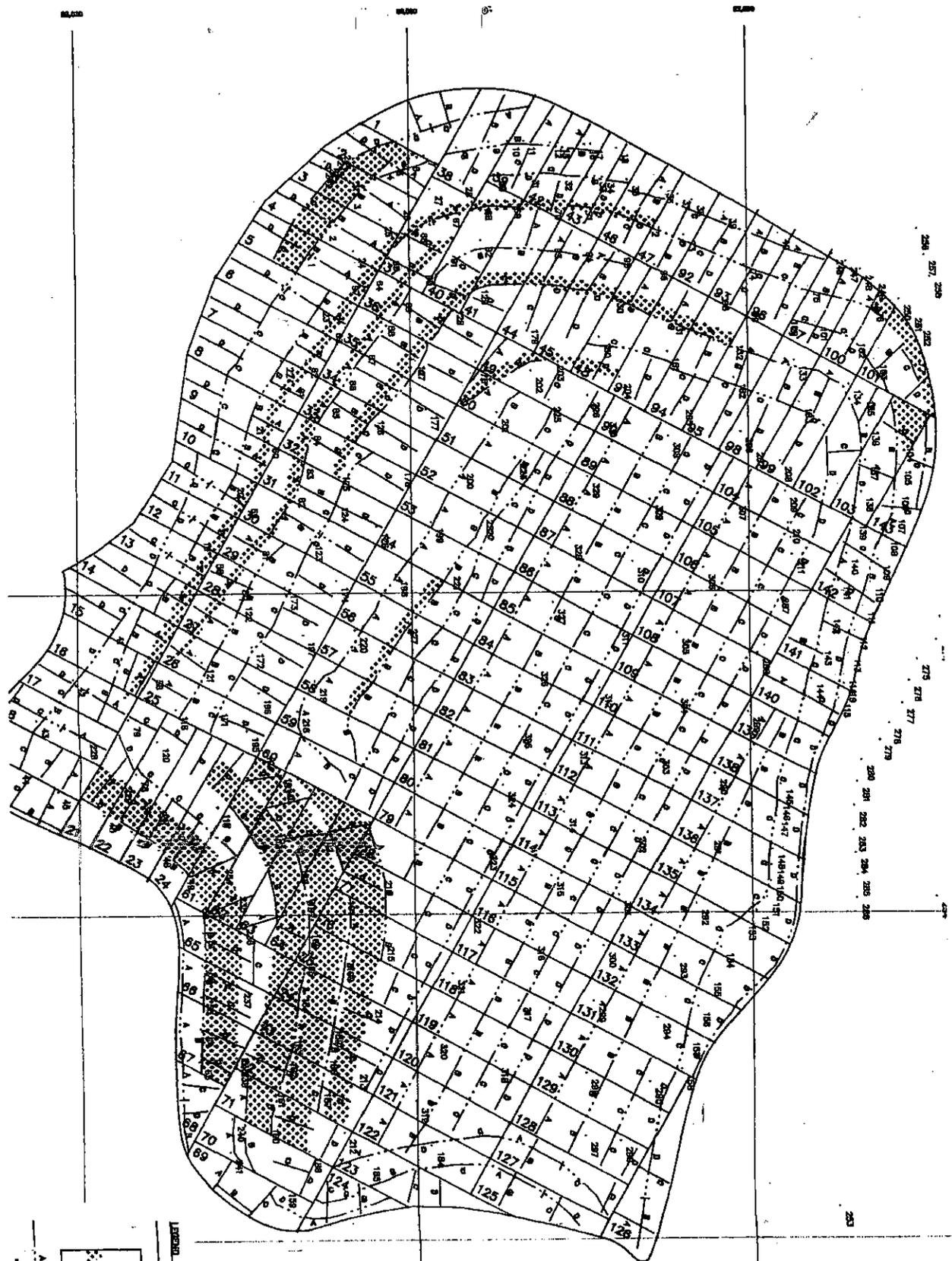
(c) Waste Characterization--Dischargers shall be responsible for accurate characterization of wastes, including determinations of whether or not wastes will be compatible with containment features and other wastes at a Unit under ¶(b), and whether or not wastes are required to be managed as hazardous wastes under Chapter 11 of Division 4.5 of Title 22 of this code.

(d) Management of Liquids at Landfills and Waste Piles--The following requirements apply to discharges of liquids at Class II waste piles and at Class II and Class III landfills, except as otherwise required for MSW landfills by more-stringent state and federal requirements under SWRCB Resolution No. 93-62 section 2908 of Title 23 of this Code (see 40CFR258.28) [Note: see also definitions of "leachate" and "landfill gas condensate" in §20164]:

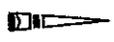
(1) [Reserved.];

(2) wastes containing free liquids shall not be discharged to a Class II waste pile. Any waste that contains liquid in excess of the moisture-holding capacity of the waste in the Class II landfill, or which contains liquid in excess of the moisture-holding capacity as a result of waste management operations, compaction, or settlement shall only be discharged to a surface impoundment or to another Unit with containment features equivalent to a surface impoundment; and

(3) liquids or semi-solid waste (i.e., waste containing less than 50 percent solids, by weight), other than dewatered sewage or water treatment sludge as described in §20220(c), shall not be discharged to Class III landfills. Exceptions may be granted by the RWQCB if the discharger can demonstrate that such discharge will not exceed the moisture-holding capacity of the landfill, either initially or as a result of waste management operations, compaction, or settlement, so long as such discharge is not otherwise prohibited by applicable state or federal requirements



CLASS B LANDS  
 APPROX. BOUNDS OF PLANTATION  
 OR RESERVATION SHOWN  
 SHADING INDICATES  
 EXISTING CULTIVATED AREAS  
 UNSHADING INDICATES  
 UNCULTIVATED AREAS  
 UNIMPROVED CLASS B LANDS  
 1957







BKK LANDFILL CLASS III  
VERTICAL GAS WELLS

MAP ID NO	LNWLNO						
1	W3A-0.40	41	W3B-086	81	W3D--02	121	W3D--98
2	W3A-0.50	42	W3B-087	82	W3D-3	122	W3D--99
3	W3A-0.60	43	W3B-088	83	W3D-03.5	123	W3E--01
4	W3A-0.75	44	W3B-089	84	W3D-4	124	W3E-01.5
5	W3A--01	45	W3B-090	85	W3D-04.5	125	W3E--02
6	W3A-01.5	46	W3B-091	86	W3D-5	126	W3E--03
7	W3A--02	47	W3B-092	87	W3D-05.5	127	W3E--04
8	W3A--03	48	W3B-093	88	W3D-6	128	W3E--05
9	W3A--04	49	W3B-094	89	W3D-06.5	129	W3E-5.5
10	W3A-04.5	50	W3B-095	90	W3D--07	130	W3E-7.5
11	W3A--05	51	W3B-096	91	W3D-07.5	131	W3E-08.5
12	W3A-5.75	52	W3B-097	92	W3D--08	132	W3E-09.5
13	W3A-06	53	W3B-098	93	W3D--09	133	W3E-10.5
14	W3A-6R	54	W3B-099	94	W3D-09.5	134	W3E--12
15	W3A-6.50	55	W3B-0100	95	W3D-010	135	W3E--13
16	W3A-6.75	56	W3C--01	96	W3D-10.5	136	W3E--14
17	W3A-07	57	W3C-2	97	W3D-011	137	W3E--15
18	W3A-08	58	W3C-3	98	W3D-11.5	138	W3E--16
19	W3B--01	59	W3C-4	99	W3D-012	139	W3E--17
20	W3B--02	60	W3C-5	100	W3D-12.5	140	W3E--18
21	W3B--03	61	W3C--06	101	W3D-013	141	W3E--19
22	W3B--04	62	W3C-6.5	102	W3D-13.5	142	W3E--20
23	W3B--05	63	W3C--07	103	W3D-014	143	W3E--21
24	W3B--06	64	W3C--08	104	W3D-017	144	W3E--22
25	W3B06.75	65	W3C--8.5	105	W3D-018	145	W3E--34
26	W3B--07	66	W3C--09	106	W3D-019	146	W3E-34.5
27	W3B-07.5	67	W3C-09.5	107	W3D-020	147	W3E--35
28	W3B--08	68	W3C-10	108	W3D-021	148	W3E--36
29	W3B08.25	69	W3C-10.5	109	W3D-022	149	W3E-36.5
30	W3B-08.5	70	W3C-11	110	W3D-023	150	W3E--37
31	W3B--09	71	W3C-11.5	111	W3D-024	151	W3E-37.5
32	W3B-09.5	72	W3C-12.5	112	W3D-025	152	W3E--38
33	W3B--10	73	W3C-13	113	W3D-026	153	W3E-38.5
34	W3B10.25	74	W3C-14	114	W3D-027	154	W3E--39
35	W3B10.5	75	W3C-15	115	W3D-028	155	W3E--40
36	W3B--11	76	W3C-16	116	W3D-094	156	W3E--41
37	W3B11.25	77	W3C-17	117	W3D-095	157	W3E--42
38	W3B-11.5	78	W3C-97	118	W3D-097	158	W3E--43
39	W3B--12	79	W3C-98	119	W3D--35	159	W3E-79
40	W3B--13	80	W3D--01	120	W3D--96	160	W3E-81

BKK LANDFILL CLASS III  
VERTICAL GAS WELLS

MAP ID NO	LNWLNO						
161	W3E-82	201	W3G-04	241	W3HR-21	281	W3T551
162	W3E-83	202	W3G-05	242	W3MR-01	282	W3T553
163	W3E-84	203	W3G-06	243	W3MR-02	283	W3T555
164	W3E-85	204	W3G-07	244	W3MR-03	284	W3T557
165	W3E-86	205	W3G-08	245	W3MR-04	285	W3T559
166	W3E-87	206	W3G-09	246	W3MR-18	286	W3T561
167	W3E-88	207	W3G-22	247	W3MR-19	287	W3TD-01
168	W3E-89	208	W3G-23	248	W3MR-20	288	W3TD-02
169	W3E-94	209	W3G-24	249	W3MR-21	289	W3TD-03
170	W3E-95	210	W3G-25	250	W3MR-22	290	W3TD-04
171	W3E-97	211	W3G-26	251	W3MR-23	291	W3TD-05
172	W3E-98	212	W3G-82	252	W3MR-24	292	W3TD-06
173	W3E-99	213	W3G-84	253	WNFR-01	293	W3TD-07
174	W3F-01	214	W3G-86	254	WNFR-04	294	W3TD-08
175	W3F-02	215	W3G-88	255	WNFR-07	295	W3TD-09
176	W3F-03	216	W3G-90	256	W3T501	296	W3TD-010
177	W3F-04	217	W3G-92	257	W3T503	297	W3TD-011
178	W3F-05	218	W3G-97	258	W3T505	298	W3TD-012
179	W3F-06	219	W3G-98	259	W3T507	299	W3TD-013
180	W3F-07	220	W3G-99	260	W3T509	300	W3TD-014
181	W3F-08	221	W3H-01	261	W3T511	301	W3TD-015
182	W3F-09	222	W3H-02	262	W3T513	302	W3TD-016
183	W3F-10	223	W3H-03	263	W3T515	303	W3TD-017
184	W3F-77	224	W3H-04	264	W3T517	304	W3TD-018
185	W3F-79	225	W3H-05	265	W3T519	305	W3TD-019
186	W3F-81	226	W3H-06	266	W3T521	306	W3TD-020
187	W3F-83	227	W3H-99	267	W3T523	307	W3TD-021
188	W3F-84	228	W3HR-06	268	W3T525	308	W3TD-022
189	W3F-85	229	W3HR-08	269	W3T527	309	W3TD-023
190	W3F-87	230	W3HR-8.5	270	W3T529	310	W3TD-024
191	W3F-89	231	W3HR-9	271	W3T531	311	W3TD-025
192	W3F-91	232	W3HR-10	272	W3T533	312	W3TD-026
193	W3F-96	233	W3HR-11	273	W3T535	313	W3TD-027
194	W3F-97	234	W3HR-12	274	W3T537	314	W3TD-028
195	W3F-97.5	235	W3HR-13	275	W3T539	315	W3TD-029
196	W3F-98	236	W3HR-14	276	W3T541	316	W3TD-030
197	W3F-99	237	W3HR-16	277	W3T543	317	W3TD-031
198	W3G-01	238	W3HR-18	278	W3T545	318	W3TD-032
199	W3G-02	239	W3HR-19	279	W3T547	319	W3TD-034
200	W3G-03	240	W3HR-20	280	W3T549	320	W3TD-035
321	W3TD-036	324	W3TD-039	327	W3TD-042	329	W3TD-044
322	W3TD-037	325	W3TD-040	328	W3TD-043	330	W3TD-045
323	W3TD-038	326	W3TD-041				



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### SECTION J: AIR TOXICS [40CFR 63 Subpart AAAA 01-16-2003]

#### NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS - MUNICIPAL SOLID WASTE LANDFILLS

- (1) The owner/operator of a municipal solid waste (MSW) landfill shall comply with all applicable requirements of 40 CFR 63, Subpart AAAA and of 40 CFR 63, Subpart A – General Provisions by the compliance date(s) that are specified in these subparts.
- (2) The owner/operator of a MSW landfill system shall comply with all applicable requirements for installation and operation of a landfill gas collection and/or control system as specified in 40 CFR 60, subpart Cc or WWW.
- (3) The operator shall keep all records pursuant to Section 63.1980 of this subpart or Subpart A to demonstrate compliance with all applicable requirements. All records including data, calculations and any supporting documentation shall be prepared in a format which is acceptable to the AQMD.
- (4) The operator shall submit all reports, notifications, plans, submittals and other communications required by Section 63.1980 of this subpart or Subpart A to the AQMD and, unless notified to the contrary by AQMD or US EPA, to US EPA Region IX (See Sections E and K of this permit for addresses).
- (5) Alternative plans, compliance plans, and the construction and operation of new or modified air pollution control equipment that are required by this subpart shall be approved through the AQMD permit system.



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### SECTION K: TITLE V Administration

#### GENERAL PROVISIONS

1. This permit may be revised, revoked, reopened and reissued, or terminated for cause, or for failure to comply with regulatory requirements, permit terms, or conditions. [3004(a)(7)(C)]
2. This permit does not convey any property rights of any sort or any exclusive privilege. [3004(a)(7)(E)]

#### Permit Renewal and Expiration

3. (A) Except for solid waste incineration facilities subject to standards under section 129(e) of the Clean Air Act, this permit shall expire five years from the date that this Title V permit is issued. The operator's right to operate under this permit terminates at midnight on this date, unless the facility is protected by an application shield in accordance with Rule 3002(b), due to the filing of a timely and complete application for a Title V permit renewal, consistent with Rule 3003. [3004(a)(2), 3004(f)]  
  
(B) A Title V permit for a solid waste incineration facility combusting municipal waste subject to standards under Section 129(e) of the Clean Air Act shall expire 12 years from the date of issuance unless such permit has been renewed pursuant to this regulation. These permits shall be reviewed by the Executive Officer at least every five years from the date of issuance. [3004(f)(2)]
4. To renew this permit, the operator shall submit to the Executive Officer an application for renewal at least 180 days, but not more than 545 days, prior to the expiration date of this permit. [3003(a)(6)]

#### Duty to Provide Information

5. The applicant for, or holder of, a Title V permit shall furnish, pursuant to Rule 3002(d) and (e), timely information and records to the Executive Officer or designee within a reasonable time as specified in writing by the Executive Officer or designee. [3004(a)(7)(F)]

#### Payment of Fees

6. The operator shall pay all required fees specified in Regulation III - Fees. [3004(a)(7)(G)]



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### SECTION K: TITLE V Administration

#### Reopening for Cause

7. The Executive Officer will reopen and revise this permit if any of the following circumstances occur:
- (A) Additional regulatory requirements become applicable with a remaining permit term of three or more years. Reopening is not required if the effective date of the requirement is later than the expiration date of this permit, unless the permit or any of its terms and conditions has been extended pursuant to paragraph (f)(4) of Rule 3004.
  - (B) The Executive Officer or EPA Administrator determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
  - (C) The Executive Officer or EPA Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements. [3005(g)(1)]

#### COMPLIANCE PROVISIONS

8. The operator shall comply with all regulatory requirements, and all permit terms and conditions, except:
- (A) As provided for by the emergency provisions of condition no. 17 or condition no. 18, or
  - (B) As provided by an alternative operating condition granted pursuant to a federally approved (SIP-approved) Rule 518.2.

Any non-compliance with any federally enforceable permit condition constitutes a violation of the Federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or denial of a permit renewal application. Non-compliance may also be grounds for civil or criminal penalties under the California State Health and Safety Code. [3004(a)(7)(A)]



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### SECTION K: TITLE V Administration

9. The operator shall allow the Executive Officer or authorized representative, upon presentation of appropriate credentials to:
  - (A) Enter the operator's premises where emission-related activities are conducted, or records are kept under the conditions of this permit;
  - (B) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
  - (C) Inspect at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
  - (D) Sample or monitor at reasonable times, substances or parameters for the purpose of assuring compliance with the facility permit or regulatory requirements. [3004(a)(10)(B)]
  
10. All terms and conditions in this permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the EPA Administrator and citizens under the federal Clean Air Act, unless the term or condition is designated as not federally enforceable. Each day during any portion of which a violation occurs is a separate offense. [3004(g)]
  
11. A challenge to any permit condition or requirement raised by EPA, the operator, or any other person, shall not invalidate or otherwise affect the remaining portions of this permit. [3007(b)]
  
12. The filing of any application for a permit revision, revocation, or termination, or a notification of planned changes or anticipated non-compliance does not stay any permit condition. [3004(a)(7)(D)]
  
13. It shall not be a defense for a person in an enforcement action, including those listed in Rule 3002(c)(2), that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit, except as provided for in "Emergency Provisions" of this section. [3004(a)(7)(H)]



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### SECTION K: TITLE V Administration

14. The operator shall not build, erect, install, or use any equipment, the use of which, without resulting in a reduction in the total release of air contaminants to atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Chapter 3 (commencing with Section 41700) of Part 4, of Division 26 of the California Health and Safety Code or of AQMD rules. This rule shall not apply to cases in which the only violation involved is of Section 41700 of the California Health and Safety Code, or Rule 402 of AQMD Rules. [408]
15. Nothing in this permit or in any permit shield can alter or affect:
- (A) Under Section 303 of the federal Clean Air Act, the provisions for emergency orders;
  - (B) The liability of the operator for any violation of applicable requirements prior to or at the time of permit issuance;
  - (C) The applicable requirements of the Acid Rain Program, Regulation XXXI;
  - (D) The ability of EPA to obtain information from the operator pursuant to Section 114 of the federal Clean Air Act;
  - (E) The applicability of state or local requirements that are not "applicable requirements", as defined in Rule 3000, at the time of permit issuance but which do apply to the facility, such as toxics requirements unique to the State; and
  - (F) The applicability of regulatory requirements with compliance dates after the permit issuance date. [3004(c)(3)]
16. For any portable equipment that requires an AQMD or state permit or registration, excluding a) portable engines, b) military tactical support equipment and c) AQMD-permitted portable equipment that are not a major source, are not located at the facility for more than 12 consecutive months after commencing operation, and whose operation does not conflict with the terms or conditions of this Title V permit: 1) the facility operator shall keep a copy of the AQMD or state permit or registration; 2) the equipment operator shall comply with the conditions on the permit or registration and all other regulatory requirements; and 3) the facility operator shall treat the permit or registration as a part of its Title V permit, subject to recordkeeping, reporting and certification requirements. [3004(a)(1)]



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### SECTION K: TITLE V Administration EMERGENCY PROVISIONS

17. An emergency<sup>1</sup> constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limit only if:
- (A) Properly signed, contemporaneous operating records or other credible evidence demonstrate that:
    - (1) An emergency occurred and the operator can identify the cause(s) of the emergency;
    - (2) The facility was operated properly (i.e. operated and maintained in accordance with the manufacturer's specifications, and in compliance with all regulatory requirements or a compliance plan), before the emergency occurred;
    - (3) The operator took all reasonable steps to minimize levels of emissions that exceeded emissions standard, or other requirements in the permit; and,
    - (4) The operator submitted a written notice of the emergency to the AQMD within two working days of the time when the emissions limitations were exceeded due to the emergency. The notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
  - (B) The operator complies with the breakdown provisions of Rule 430 – Breakdown Provisions, or subdivision (i) of Rule 2004 – Requirements, whichever is applicable. [3002(g), 430, 2004(i)]
18. The operator is excused from complying with any regulatory requirement that is suspended by the Executive Officer during a state of emergency or state of war emergency, in accordance with Rule 118 - Emergencies. [118]

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<sup>1</sup> "Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the operator, including acts of God, which: (A) requires immediate corrective action to restore normal operation; and (B) causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency; and (C) is not caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### SECTION K: TITLE V Administration RECORDKEEPING PROVISIONS

19. In addition to any other recordkeeping requirements specified elsewhere in this permit, the operator shall keep records of required monitoring information, where applicable, that include:
- (A) The date, place as defined in the Title V permit, and time of sampling or measurements;
  - (B) The date(s) analyses were performed;
  - (C) The company or entity that performed the analyses;
  - (D) The analytical techniques or methods used;
  - (E) The results of such analyses; and
  - (F) The operating conditions as existing at the time of sampling or measurement. [3004(a)(4)(B)]
20. The operator shall maintain records pursuant to Rule 109 and any applicable material safety data sheet (MSDS) for any equipment claimed to be exempt from a written permit by Rule 219 based on the information in those records. [219(t)]
21. The operator shall keep all records of monitoring data required by this permit or by regulatory requirements for a period of at least five years from the date of the monitoring sample, measurement, report, or application. [3004(a)(4)(E)]

### REPORTING PROVISIONS

22. The operator shall comply with the following requirements for prompt reporting of deviations:
- (A) Breakdowns shall be reported as required by Rule 430 – Breakdown Provisions or subdivision (i) of Rule 2004 - Requirements, whichever is applicable.



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### SECTION K: TITLE V Administration

- (B) Other deviations from permit or applicable rule emission limitations, equipment operating conditions, or work practice standards, determined by observation or by any monitoring or testing required by the permit or applicable rules that result in emissions greater than those allowed by the permit or applicable rules shall be reported within 72 hours (unless a shorter reporting period is specified in an applicable State or Federal Regulation) of discovery of the deviation by contacting AQMD enforcement personnel assigned to this facility or otherwise calling (800) CUT-SMOG.
  - (C) A written report of such deviations reported pursuant to (B), and any corrective actions or preventative measures taken, shall be submitted to AQMD, in an AQMD approved format, within 14 days of discovery of the deviation.
  - (D) All other deviations shall be reported with the monitoring report required by condition no. 23. [3004(a)(5)]
23. Unless more frequent reporting of monitoring results are specified in other permit conditions or in regulatory requirements, the operator shall submit reports of any required monitoring to the AQMD at least twice per year. The report shall include a) a statement whether all monitoring required by the permit was conducted; and b) identification of all instances of deviations from permit or regulatory requirements. A report for the first six calendar months of the year is due by August 31 and a report for the last six calendar months of the year is due by February 28. [3004(a)(4)(F)]
24. The operator shall submit to the Executive Officer and to the Environmental Protection Agency (EPA), an annual compliance certification. For RECLAIM facilities, the certification is due when the Annual Permit Emissions Program (APEP) report is due and shall cover the same reporting period. For other facilities, the certification is due on March 1 for the previous calendar year. The certification need not include the period preceding the date the initial Title V permit was issued. Each compliance certification shall include:
- (A) Identification of each permit term or condition that is the basis of the certification;



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### SECTION K: TITLE V Administration

- (B) The compliance status during the reporting period;
- (C) Whether compliance was continuous or intermittent;
- (D) The method(s) used to determine compliance over the reporting period and currently, and
- (E) Any other facts specifically required by the Executive Officer to determine compliance.

The EPA copy of the certification shall be sent to: Director of the Air Division Attn:  
Air-3 USEPA, Region IX 75 Hawthorne St. San Francisco, CA 94105 [3004(a)(10)(E)]

25. All records, reports, and documents required to be submitted by a Title V operator to AQMD or EPA shall contain a certification of accuracy consistent with Rule 3003(c)(7) by a responsible official (as defined in Rule 3000). [3004(a)(12)]

### PERIODIC MONITORING

26. All periodic monitoring required by this permit pursuant to Rule 3004(a)(4)(c) is based on the requirements and justifications in the AQMD document "Periodic Monitoring Guidelines for Title V Facilities" or in case-by-case determinations documented in the TitleV application file. [3004(a)(4)]



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### SECTION K: TITLE V Administration

#### *FACILITY RULES*

*This facility is subject to the following rules and regulations*

With the exception of Rule 402, 473, 477, 1118 and Rules 1401 through 1420, the following rules that are designated as non-federally enforceable are pending EPA approval as part of the state implementation plan. Upon the effective date of that approval, the approved rule(s) will become federally enforceable, and any earlier versions of those rules will no longer be federally enforceable.

<b>RULE SOURCE</b>	<b>Adopted/Amended Date</b>	<b>FEDERAL Enforceability</b>
RULE 109	5-2-2003	Federally enforceable
RULE 1110.2	7-9-2010	Non federally enforceable
RULE 1113	11-8-1996	Federally enforceable
RULE 1113	6-3-2011	Non federally enforceable
RULE 1150.1	3-17-2000	Federally enforceable
RULE 1150.1	4-1-2011	Non federally enforceable
RULE 1171	11-7-2003	Federally enforceable
RULE 1171	5-1-2009	Non federally enforceable
RULE 118	12-7-1995	Non federally enforceable
RULE 1303(b)(1)	10-20-2000	Non federally enforceable
RULE 1303(b)(1)-Modeling	5-10-1996	Federally enforceable
RULE 1303(b)(2)-Offset	12-6-2002	Non federally enforceable
RULE 1303(b)(2)-Offset	5-10-1996	Federally enforceable
RULE 1304(a)-Modeling and Offset Exemption	6-14-1996	Federally enforceable
RULE 1304(c)-Offset Exemption	6-14-1996	Federally enforceable
RULE 1309.1	5-3-2002	Federally enforceable
RULE 1309.1	8-3-2007	Non federally enforceable
RULE 1401	9-10-2010	Non federally enforceable
RULE 1415	10-14-1994	Non federally enforceable
RULE 1418	9-10-1999	Non federally enforceable



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### SECTION K: TITLE V Administration

<b>RULE SOURCE</b>	<b>Adopted/Amended Date</b>	<b>FEDERAL Enforceability</b>
RULE 1470	6-1-2007	Non federally enforceable
RULE 204	10-8-1993	Federally enforceable
RULE 217	1-5-1990	Federally enforceable
RULE 219	7-14-2006	Non federally enforceable
RULE 219	9-4-1981	Federally enforceable
RULE 3002	11-14-1997	Federally enforceable
RULE 3003	11-14-1997	Federally enforceable
RULE 3003	3-16-2001	Non federally enforceable
RULE 3004	12-12-1997	Federally enforceable
RULE 3005	11-14-1997	Federally enforceable
RULE 3005	3-16-2001	Non federally enforceable
RULE 3007	10-8-1993	Federally enforceable
RULE 301	5-6-2011	Non federally enforceable
RULE 304	6-9-2006	Non federally enforceable
RULE 306	5-6-2011	Non federally enforceable
RULE 401	11-9-2001	Non federally enforceable
RULE 401	3-2-1984	Federally enforceable
RULE 402	5-7-1976	Non federally enforceable
RULE 403	12-11-1998	Federally enforceable
RULE 403	6-3-2005	Non federally enforceable
RULE 404	2-7-1986	Federally enforceable
RULE 407	4-2-1982	Federally enforceable
RULE 408	5-7-1976	Federally enforceable
RULE 409	8-7-1981	Federally enforceable
RULE 430	7-12-1996	Non federally enforceable
RULE 431.1	11-17-1995	Non federally enforceable
RULE 431.1	6-12-1998	Federally enforceable
RULE 431.2	5-4-1990	Federally enforceable
RULE 431.2	9-15-2000	Non federally enforceable
RULE 461	3-7-2008	Non federally enforceable
RULE 461	4-21-2000	Federally enforceable
RULE 463	3-11-1994	Federally enforceable
RULE 463	5-6-2005	Federally enforceable



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

**SECTION K: TITLE V Administration**

<b>RULE SOURCE</b>	<b>Adopted/Amended Date</b>	<b>FEDERAL Enforceability</b>
RULE 701	6-13-1997	Federally enforceable
CA PRC CEQA	11-23-1970	Non federally enforceable
40CFR 60 Subpart WWW	10-17-2000	Federally enforceable
40CFR 63 Subpart AAAA	1-16-2003	Federally enforceable
40CFR 63 Subpart AAAA	4-20-2006	Federally enforceable
40CFR 68 - Accidental Release Prevention	5-24-1996	Federally enforceable
40CFR 82 Subpart B	7-14-1992	Federally enforceable
40CFR 82 Subpart F	5-14-1993	Federally enforceable



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**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

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APPENDIX A: NOX AND SOX EMITTING EQUIPMENT EXEMPT FROM WRITTEN  
PERMIT PURSUANT TO RULE 219

NONE



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

**APPENDIX B: RULE EMISSION LIMITS  
[RULE 1113 11-08-1996]**

- (1) Except as provided in paragraphs (c)(2), (c)(3), and (c)(4) of Rule 1113, the operator shall not supply, sell, offer for sale, apply, or solicit the application of, any architectural coating which, at the time of sale or manufacture, contains more than 250 grams of VOC per liter of coating (2.08 pounds per gallon), less water, less exempt compounds, and less any colorant added to tint bases, or manufacture, blend, or repackage such a coating for use within the District.
- (2) Except as provided in paragraphs (c)(3) and (c)(4) of Rule 1113, the operator shall not supply, sell, offer for sale, apply, solicit the application of, manufacture, blend, or repackage, for use within the District, any architectural coating listed in the Table of Standards which contains VOC (excluding any colorant added to tint bases) in excess of the corresponding VOC limit specified in the table, after the effective date specified.

**TABLE OF STANDARDS**

**VOC LIMITS**

**Grams of VOC Per Liter of Coating,  
Less Water And Less Exempt Compounds**

COATING	Limit*	Effective Date of Adoption	Effective 1/1/1998	Effective 1/1/1999	Effective 7/1/2001	Effective 1/1/2005	Effective 7/1/2008
Bond Breakers	350						
Clear Wood Finishes							
Varnish	350						
Sanding Sealers	350						
Lacquer	680		550			275	
Concrete-Curing Compounds	350						
Dry-Fog Coatings	400						
Fire-proofing Exterior Coatings	350	450		350			
Fire-Retardant Coatings							
Clear	650						
Pigmented	350						
Flats	250				100		50
Graphic Arts (Sign) Coatings	500						



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

**APPENDIX B: RULE EMISSION LIMITS  
[RULE 1113 11-08-1996]**

Industrial Maintenance						
Primers and Topcoats						
Alkyds	420					
Catalyzed Epoxy	420					
Bituminous Coatings	420					
Materials						
Inorganic Polymers	420					
Vinyl Chloride Polymers	420					
Chlorinated Rubber	420					
Acrylic Polymers	420					
Urethane Polymers	420					
Silicones	420					
Unique Vehicles	420					
Japans/Faux Finishing	350	700		350		
Coatings						
Magnesite Cement Coatings	600			450		
Mastic Coatings	300					
Metallic Pigmented Coatings	500					
Multi-Color Coatings	420		250			
Pigmented Lacquer	680		550		275	
Pre-Treatment Wash Primers	780					
Primers, Sealers, and Undercoaters	350					
Quick-Dry Enamels	400					
Roof Coatings	300					
Shellac						
Clear	730					
Pigmented	550					
Stains	350					
Swimming Pool Coatings						
Repair	650					
Other	340					
Traffic Coatings	250		150			
Waterproofing Sealers	400					
Wood Preservatives						
Below-Ground	350					
Other	350					

\* The specified limits remain in effect unless revised limits are listed in subsequent columns in the Table of Standards

**TABLE OF STANDARDS (cont.)**

**VOC LIMITS**

**Grams of VOC Per Liter of Material**

COATING	Limit
Low-Solids Coating	120



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### APPENDIX B: RULE EMISSION LIMITS [RULE 1113 06-03-2011]

- (1) Except as provided in paragraphs (c)(3), (c)(4), and designated coatings averaged under (c)(6) of Rule 1113, no person shall supply, sell, offer for sale, market, manufacture, blend, repackage, apply, store at a worksite, or solicit the application of any architectural coating within the District:
  - (A) That is listed in the Table of Standards 1 and contains VOC (excluding any colorant added to tint bases) in excess of the corresponding VOC limit specified in the table, after the effective date specified; or
  - (B) That is not listed in the Table of Standards 1, and contains VOC (excluding any colorant added to tint bases) in excess of 250 grams of VOC per liter of coating (2.08 pounds per gallon), less water, less exempt compounds, until January 1, 2014, at which time the limit drops to 50 grams of VOC per liter of coating, less water, less exempt compounds (0.42 pounds per gallon).
- (2) No person within the District shall add colorant at the point of sale that is listed in the Table of Standards 2 and contains VOC in excess of the corresponding VOC limit specified in the Table of Standards 2, after the effective date specified.



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

**APPENDIX B: RULE EMISSION LIMITS  
[RULE 1113 06-03-2011]**

**TABLE OF STANDARDS 1  
VOC LIMITS**

**Grams of VOC Per Liter of Coating,  
Less Water and Less Exempt Compounds**

COATING CATEGORY	Ceiling Limit <sup>1</sup>	Current Limit <sup>2</sup>	Effective Date		
			7/1/08	1/1/12	1/1/14
Bond Breakers		350			
Clear Wood Finishes		275			
Varnish	350	275			
Sanding Sealers	350	275			
Lacquer		275			
Concrete-Curing Compounds		100			
Concrete-Curing Compounds For Roadways and Bridges <sup>1</sup>		350			
Concrete Surface Retarder		250			50
Driveway Sealer		100		50	
Dry-Fog Coatings		150			50
Faux Finishing Coatings					
Clear Topcoat		350		200	
Decorative Coatings		350			100
Glazes		350			
Japan		350			
Trowel Applied Coatings		350		150	50
Fire-Proofing Coatings		350			150
Flats	250	50	50		
Floor Coatings	100	50			
Form Release Compound		250			100
Graphic Arts (Sign) Coatings		500			150
Industrial Maintenance (IM) Coatings	420	100			
High Temperature IM Coatings		420			
Non-Sacrificial Anti-Graffiti Coatings		100			
Zinc-Rich IM Primers	340	100			
Magnesite Cement Coatings		450			
Mastic Coatings		300			100
Metallic Pigmented Coatings	500	500			150
Multi-Color Coatings		250			
Nonflat Coatings	150	50			
Pre-Treatment Wash Primers		420			
Primers, Sealers, and Undercoaters	200	100			
Reactive Penetrating Sealers		350			
Recycled Coatings		250			
Roof Coatings	250	50			
Roof Coatings, Aluminum		100			



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### APPENDIX B: RULE EMISSION LIMITS [RULE 1113 06-03-2011]

Roof Primers, Bituminous	350	350		
Rust Preventative Coatings	400	100		
Stone Consolidant		450		
Sacrificial Anti-Graffiti Coatings		100	50	
Shellac				
Clear		730		
Pigmented		550		
Specialty Primers	350	100		
Stains		100		



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

**APPENDIX B: RULE EMISSION LIMITS  
[RULE 1113 06-03-2011]**

COATING CATEGORY	Ceiling Limit <sup>1</sup>	Current Limit <sup>2</sup>	Effective Date		
			7/1/08	1/1/12	1/1/14
Stains, Interior	250	250			
Swimming Pool Coatings					
Repair		340			
Other		340			
Traffic Coatings		100			
Waterproofing Sealers	250	100			
Waterproofing Concrete/Masonry Sealers	400	100			
Wood Preservatives		350			

1. The specified ceiling limits are applicable to products sold under the Averaging Compliance Option.
2. The specified limits remain in effect unless revised limits are listed in subsequent columns in the Table of Standards.
3. Does not include compounds used for curbs and gutters, sidewalks, islands, driveways and other miscellaneous concrete areas.

**TABLE OF STANDARDS 1 (cont.)  
VOC LIMITS**

**Grams of VOC Per Liter of Material**

COATING	Limit
Low-Solids Coating	120

**TABLE OF STANDARDS 2  
VOC LIMITS FOR COLORANTS**

**Grams of VOC Per Liter of Colorant  
Less Water and Less Exempt Compounds**

COLORANT	Limit <sup>4</sup>
Architectural Coatings, excluding IM Coatings	50
Solvent-Based IM	600
Waterborne IM	50

4. Effective January 1, 2014.



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### APPENDIX B: RULE EMISSION LIMITS [RULE 1171 11-07-2003]

(1) Solvent Requirements

A person shall not use a solvent to perform solvent cleaning operations unless the solvent complies with the applicable requirements set forth below:

SOLVENT CLEANING ACTIVITY	CURRENT LIMITS
	VOC g/l (lb/gal)
(A) Product Cleaning During Manufacturing Process Or Surface Preparation For Coating, Adhesive, Or Ink Application	
(i) General	25 (0.21)
(ii) Electrical Apparatus Components & Electronic Components	500 (4.2)
(iii) Medical Devices & Pharmaceuticals	800 (6.7)
(B) Repair and Maintenance Cleaning	
(i) General	25 (0.21)
(ii) Electrical Apparatus Components & Electronic Components	900 (7.5)



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### APPENDIX B: RULE EMISSION LIMITS [RULE 1171 11-07-2003]

SOLVENT CLEANING ACTIVITY	CURRENT LIMITS
	VOC g/l (lb/gal)
(iii) Medical Devices & Pharmaceuticals	
(A) Tools, Equipment, & Machinery	800 (6.7)
(B) General Work Surfaces	600 (5.0)
(C) Cleaning of Coatings or Adhesives Application Equipment	550 (4.6)
(D) Cleaning of Ink Application Equipment	
(i) General	25 (0.21)
(ii) Flexographic Printing	25 (0.21)
(iii) Gravure Printing	
(A) Publication	750 (6.3)
(B) Packaging	25 (0.21)
(iv) Lithographic or Letter Press Printing	



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### APPENDIX B: RULE EMISSION LIMITS [RULE 1171 11-07-2003]

SOLVENT CLEANING ACTIVITY	CURRENT LIMITS
	VOC g/l (lb/gal)
(A) Roller Wash – Step 1	600 (5.0)
(B) Roller Wash-Step 2, Blanket Wash, & On-Press Components	800 (6.7)
(C) Removable Press Components	25 (0.21)
(v) Screen Printing	750 (6.3)
(vi) Ultraviolet Ink/ Electron Beam Ink Application Equipment (except screen printing)	800 (6.7)
(vii) Specialty Flexographic Printing	600 (5.0)
(E) Cleaning of Polyester Resin Application Equipment	25 (0.21)



## FACILITY PERMIT TO OPERATE BKK CORP (EIS USE)

### APPENDIX B: RULE EMISSION LIMITS [RULE 1171 05-01-2009]

(1) Solvent Requirements

A person shall not use a solvent to perform solvent cleaning operations unless the solvent complies with the applicable requirements set forth below:

	<b>CURRENT LIMITS*</b>	<b>EFFECTIVE 1/1/2010</b>
<b>SOLVENT CLEANING ACTIVITY</b>	<b>VOC g/l (lb/gal)</b>	<b>VOC g/l (lb/gal)</b>
(A) Product Cleaning During Manufacturing Process Or Surface Preparation For Coating, Adhesive, Or Ink Application		
(i) General	25 (0.21)	
(ii) Electrical Apparatus Components & Electronic Components	100 (0.83)	
(iii) Medical Devices & Pharmaceuticals	800 (6.7)	
(B) Repair and Maintenance Cleaning		
(i) General	25 (0.21)	
(ii) Electrical Apparatus Components & Electronic Components	100 (0.83)	



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

**APPENDIX B: RULE EMISSION LIMITS  
[RULE 1171 05-01-2009]**

	<b>CURRENT LIMITS*</b>	<b>EFFECTIVE 1/1/2010</b>
<b>SOLVENT CLEANING ACTIVITY (cont.)</b>	<b>VOC g/l (lb/gal)</b>	<b>VOC g/l (lb/gal)</b>
(iii) Medical Devices & Pharmaceuticals		
(A) Tools, Equipment, & Machinery	800 (6.7)	
(B) General Work Surfaces	600 (5.0)	
(C) Cleaning of Coatings or Adhesives Application Equipment	25 (0.21)	
(D) Cleaning of Ink Application Equipment		
(i) General	25 (0.21)	
(ii) Flexographic Printing	25 (0.21)	
(iii) Gravure Printing		
(A) Publication	100 (0.83)	
(B) Packaging	25 (0.21)	
(iv) Lithographic (Offset) or Letter Press Printing		
(A) Roller Wash, Blanket Wash, & On-Press Components	100 (0.83)	

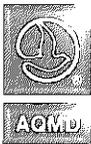


**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

**APPENDIX B: RULE EMISSION LIMITS  
[RULE 1171 05-01-2009]**

	<b>CURRENT LIMITS*</b>	<b>EFFECTIVE 1/1/2010</b>
<b>SOLVENT CLEANING ACTIVITY (cont.)</b>	<b>VOC g/l (lb/gal)</b>	<b>VOC g/l (lb/gal)</b>
(B) Removable Press Components	25 (0.21)	
(v) Screen Printing	100 (0.83)	
(vi) Ultraviolet Ink/ Electron Beam Ink Application Equipment (except screen printing)	650 (5.4)	100 (0.83)
(vii) Specialty Flexographic Printing	100 (0.83)	
(E) Cleaning of Polyester Resin Application Equipment	25 (0.21)	

\* The specified limits remain in effect unless revised limits are listed in subsequent columns.



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

**APPENDIX B: RULE EMISSION LIMITS  
[RULE 404 02-07-1986]**

The operator shall not discharge into the atmosphere from this equipment, particulate matter in excess of the concentration at standard conditions, shown in Table 404(a). Where the volume discharged is between figures listed in the Table, the exact concentration permitted to be discharged shall be determined by linear interpolation.

For the purposes of this rule, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.

**TABLE 404(a)**

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
25 or less	883 or less	450	0.196	900	31780	118	0.0515
30	1059	420	.183	1000	35310	113	.0493
35	1236	397	.173	1100	38850	109	.0476
40	1413	377	.165	1200	42380	106	.0463
45	1589	361	.158	1300	45910	102	.0445



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

**APPENDIX B: RULE EMISSION LIMITS  
[RULE 404 02-07-1986]**

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter <sup>2</sup> Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
50	1766	347	.152	1400	49440	100	.0437
60	2119	324	.141	1500	52970	97	.0424
70	2472	306	.134	1750	61800	92	.0402
80	2825	291	.127	2000	70630	87	.0380
90	3178	279	.122	2250	79460	83	.0362
100	3531	267	.117	2500	88290	80	.0349
125	4414	246	.107	3000	105900	75	.0327
150	5297	230	.100	4000	141300	67	.0293
175	6180	217	.0947	5000	176600	62	.0271
200	7063	206	.0900	6000	211900	58	.0253
250	8829	190	.0830	8000	282500	52	.0227
300	10590	177	.0773	10000	353100	48	.0210
350	12360	167	.0730	15000	529700	41	.0179
400	14130	159	.0694	20000	706300	37	.0162
450	15890	152	.0664	25000	882900	34	.0148



**FACILITY PERMIT TO OPERATE  
BKK CORP (EIS USE)**

**APPENDIX B: RULE EMISSION LIMITS  
[RULE 404 02-07-1986]**

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
		Milligrams per Cubic Meter	Grains per Cubic Foot			Milligrams per Cubic Meter	Grains per Cubic Foot
Cubic meters Per Minute	Cubic feet Per Minute			Cubic meters Per Minute	Cubic feet Per Minute		
500	17660	146	.0637	30000	1059000	32	.0140
600	21190	137	.0598	40000	1413000	28	.0122
700	24720	129	.0563	50000	1766000	26	.0114
800	28250	123	.0537	70000 or more	2472000 or more	23	.0100