

**CLARK COUNTY**  
DEPARTMENT OF AIR QUALITY  
AND ENVIRONMENTAL MANAGEMENT  
*500 South Grand Central Parkway, Box 555210, Las Vegas, Nevada 89155*  
**Authority to Construct Major Part 70 Source**  
**Source: 395**  
Issued in accordance with the  
Clark County Air Quality Regulations (AQR)

---

**ISSUED TO:** Republic Dumpco, Inc.  
770 East Sahara Avenue  
Las Vegas, Nevada 89104

**SOURCE:** Apex Waste Management Center  
13550 US Highway 93 North  
Apex, Nevada 89124

**RESPONSIBLE OFFICIAL:**

Name: Todd Whittle  
Title: Area Environmental Manager  
Phone: (702) 599-5537  
Fax Number: (702) 599-5585  
E-Mail Address: [twhittle@republicservices.com](mailto:twhittle@republicservices.com)

**Permit Issuance:** **XXXXX**

**ISSUED BY: CLARK COUNTY DEPARTMENT OF AIR QUALITY AND ENVIRONMENTAL MANAGEMENT**

---

Richard Beckstead  
Permitting Manager, Clark County DAQEM

## TABLE OF CONTENTS

<b>I</b>	<b>ACRONYMS</b>	<b>3</b>
<b>II</b>	<b>GENERAL CONDITIONS</b>	<b>4</b>
<b>III</b>	<b>SOURCE-WIDE PTE SUMMARY</b>	<b>7</b>
<b>IV</b>	<b>EMISSION UNITS AND APPLICABLE REQUIREMENTS</b>	<b>7</b>
<b>A</b>	<b>EMISSION UNITS, LIMITATIONS, AND STANDARDS</b>	<b>7</b>
<b>B</b>	<b>CONTROL REQUIREMENTS</b>	<b>8</b>
<b>C</b>	<b>MONITORING</b>	<b>8</b>
<b>D</b>	<b>TESTING</b>	<b>10</b>
<b>E</b>	<b>RECORD KEEPING</b>	<b>10</b>
<b>F</b>	<b>REPORTING</b>	<b>11</b>
<b>G</b>	<b>OTHER REQUIREMENTS</b>	<b>11</b>

## I ACRONYMS

Table I-1: Acronyms

Acronym	Term
AQR	Clark County Air Quality Regulations
ATC	Authority to Construct
Btu	British Thermal Unit
°C	Degrees Celsius
CAAA	Clean Air Act, as amended
CFR	United States Code of Federal Regulations
CO	Carbon Monoxide
DAQEM	Clark County Department of Air Quality & Environmental Management
EPA	United States Environmental Protection Agency
EU	Emission Unit
°F	Degrees Fahrenheit
ft <sup>3</sup> /yr	Cubic foot per year
GCCS	Gas Collection and Control System
HAP	Hazardous Air Pollutant
HP	Horse Power
H <sub>2</sub> S	Hydrogen Sulfide
kW	kilowatt
LANDGem	Landfill Gas Emissions Model
LFG	Landfill Gas
m <sup>3</sup> /yr	Cubic meter per year
Mg/yr	Megagram per year
MMBtu	Millions of British Thermal Units
MMscf	Million Standard Cubic Foot
M/N	Model Number
MSWL	Municipal Solid Waste Landfill
N/A	Not Applicable
NAICS	North American Industry Classification System
NMOC	Non-Methane Organic Compounds
NO <sub>x</sub>	Nitrogen Oxides
NRS	Nevada Revised Statutes
OP	Operating Permit
PM <sub>10</sub>	Particulate Matter less than 10 microns
ppm	Parts per Million
ppmvd	Parts per Million, Volumetric Dry
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
QA/AC	Quality Assurance/Quality Control
RBLC	EPA's RACT/BACT/LAER Clearinghouse database
RMP	Risk Management Plan
SCC	Source Classification Codes
scf	Standard Cubic Foot
scfm	Standard Cubic Feet per minute
SIC	Standard Industrial Classification
SIP	State Implementation Plan
S/N	Serial Number
SO <sub>x</sub>	Sulfur Oxides
SSM	Startup, Shutdown, and Malfunction
TCS	Toxic Chemical Substance
TRS	Total Reduced Sulfur
VOC	Volatile Organic Compound

## II GENERAL CONDITIONS

### A. GENERAL REQUIREMENTS

1. This Authority to Construct Permit (ATC) does not revise, consolidate, supersede, or replace any ATC previously issued for this facility.
2. This ATC does not supersede or replace any Part 70 Operating Permit (OP) requirements, including any permit conditions, compliance requirements and/or emission limitations outlined in the Part 70 (Title V) Operating Permit.
3. No person shall begin actual construction of a New Part 70 source, or modify or reconstruct an existing Part 70 source that falls within the preconstruction review applicability criteria, without first obtaining an Authority to Construct Permit from the Control Officer. *[AQR 12.4.1.1(a)]*
4. The Permittee shall post the permit in a location which is clearly visible and accessible to the facility's employees and representatives of the department. *[AQR 12.4.3.1(e)(16) and 12.13]*
5. The Permittee shall commence the construction, modification, or reconstruction of this source within eighteen (18) months after the date of issuance of this ATC and construction shall not be discontinued for a period greater than twelve (12) months. *[AQR 12.4.1.1(b)]*
6. The Permittee shall submit an application for a Part 70 OP within twelve (12) months after commencing operation of the modification or reconstruction authorized by this ATC, or on or before such earlier date that the Control Officer may establish. *[AQR 12.5.2.1(a)(1)]*
7. If the Permittee submits a timely application for a Part 70 OP as required by II-A-6, it may continue operating under its ATC until final action is taken on its application for a new Part 70 Operating Permit. However, where an existing Part 70 OP would prohibit such construction or change in operation, the Permittee must obtain a Part 70 OP revision before commencing operation. *[AQR 12.4.1.1(b) and 12.5.2.1(a)(3)]*
8. Notwithstanding the provisions of requirement II-A-7, if an existing Part 70 OP would prohibit such construction or change in operation, the source must obtain a Part 70 OP revision pursuant to Section 12.5.2.14 before commencing operation. *[AQR 12.4.1.1(c)]*
9. This ATC does not convey any property rights or any exclusive privilege. *[AQR 12.4.3.1(e)(6)]*
10. The Permittee shall pay all fees assessed pursuant to AQR Section 18. *[AQR 12.4.3.1(e)(17)]*

### B. MODIFICATION, REVISION, RENEWAL REQUIREMENTS

1. The Permittee shall file an application for any change in the Responsible Official of the source and may implement the change immediately upon submittal of the request. *[AQR 12.4.3.4(a)(1)(D) and 12.4.3.4(a)(2)(C)]*
2. The Permittee shall file an application for a transfer of ownership at least 30 days prior to the date of a change in ownership or operational control of the source and such

application shall constitute a temporary ATC under the conditions of the existing permit. [AQR 12.12.2(c) and (d)]

3. The Control Officer may revise, revoke and re-issue, re-open and revise, or terminate the permit for cause. [AQR 12.4.3.1(e)(5)]
4. The Control Officer reserves the right, upon reasonable cause, to modify existing conditions and impose additional new compliance, monitoring and control requirements. [AQR 12.4.3.1(e)(10)(B) and (C)]

### **C. REPORTING/NOTIFICATIONS/PROVIDING INFORMATION REQUIREMENTS**

1. The Permittee shall report start of construction, construction interruptions exceeding nine (9) months, and completion of construction to the Control Officer in writing not later than fifteen (15) working days after occurrence of the event. [AQR 12.4.3.1(e)(12)]
2. The Permittee shall provide written notification of the actual date of commencing operation, received by the Control Officer, within fifteen (15) calendar days after such date. [AQR 12.4.3.1(e)(13)]
3. The Permittee shall provide separate written notification for commencing operation for each unit of phased construction, which may involve a series of units commencing operation at different times. [AQR 12.4.3.1(e)(14)]
4. The Permittee shall retain records of all required monitoring and performance demonstration data and supporting information for five (5) years after the date of the sample collection, measurement, report, or analysis. Supporting information includes all records regarding calibration and maintenance of the monitoring equipment, all original strip-chart recordings for continuous monitoring instrumentation, and if applicable, all other records required to be maintained pursuant to 40 CFR 64.9(b). [AQR 12.4.3.1(e)(1)]
5. The Permittee shall allow the Control Officer or any authorized representative of the Control Officer upon presentation of credentials to enter the Permittee's premises where the source is located or emissions related activity is conducted to: [AQR 12.4.3.1(e)(8)]
  - a. Have access to and copy during normal business hours any records that are kept pursuant to the conditions of the permit;
  - b. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices or operations regulated or required under this permit;
  - c. Sample or monitor substances or parameters to determine compliance with the conditions of the permit or applicable requirements; and
  - d. Document alleged violations using devices such as cameras or video equipment.
6. The Permittee shall provide the Control Officer, within a reasonable time, with any information that the Control Officer requests in writing to determine whether cause exists for revising, revoking and re-issuance or terminating the permit, or to determine compliance with the conditions of the permit. Upon request the Permittee shall also furnish to the Control Officer copies of any records required to be kept by the permit, or for information claimed to be confidential, the Permittee may furnish such records directly to the Administrator along with a claim of confidentiality. [AQR 12.4.3.1(e)(7)]

## D. COMPLIANCE REQUIREMENTS

1. The Permittee shall comply with all conditions contained in this ATC. Any noncompliance constitutes a violation and is grounds for an action for non-compliance, revocation and re-issuance or the termination of the permit by the Control Officer, or the re-opening or revising of the permit by the Permittee as directed by the Control Officer. [AQR 12.4.3.1(e)(3)]
2. Each of the conditions and requirements of this permit are severable and if any are held invalid, the remaining conditions and requirements continue in effect. [AQR 12.4.3.1(e)(2)]
3. The need to halt or reduce activity to maintain compliance with the conditions of the permit is not a defense to noncompliance with any condition of the permit. [AQR 12.4.3.1(e)(4)]
4. The Permittee shall promptly report to the Control Officer (500 Grand Central Parkway, Box 555210, Las Vegas, NV 89155) upon the commencement of operation deviations from permit requirements, including those attributable to malfunction, startup, or shut-down. All reports of deviations shall identify the probable cause of the deviations and any corrective actions or preventative measures taken. [AQR 12.5.2.6(d)(4)(B) and (C)]
5. A responsible official of the source shall certify that, based on information and belief formed after a reasonable inquiry, the statements made in any document required to be submitted by any condition of the permit are true, accurate, and complete. [AQR 12.4.3.1(e)(9)]

### III SOURCE-WIDE PTE SUMMARY

- A. Republic is a major source for PM<sub>10</sub>, NO<sub>x</sub>, CO, HAP, and H<sub>2</sub>S, a synthetic minor of SO<sub>x</sub>, and minor for PM<sub>2.5</sub> and VOC.

**Table III-A-1: Source PTE (tons per year)**

	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>	CO	SO <sub>x</sub>	VOC	HAP	H <sub>2</sub> S
<b>Non-Fugitive PTE</b>	259.74	13.79	137.43	113.91	66.62	30.94	9.72	0.43
<b>Fugitive Emissions from Landfill Gas</b>	0.00	0.00	0.00	0.00	0.00	0.00	32.16	147.27
<b>Total PTE</b>	<b>259.74</b>	<b>13.79</b>	<b>137.43</b>	<b>113.91</b>	<b>66.62</b>	<b>30.94</b>	<b>41.88</b>	<b>147.70</b>

### IV EMISSION UNITS AND APPLICABLE REQUIREMENTS

#### A EMISSION UNITS, LIMITATIONS, AND STANDARDS

##### 1. Emission Units

- a. The emission unit covered by this ATC is listed in Table IV-A-1. [AQR 12.4.3.1(e)(10)]

**Table IV-A-1: Summary of Emission Units**

EU	Flow Rate	Type	Manufacturer	Model Number	Serial Number
W11	5,000 dscfm	Enclosed Combustion Flare	John Zink	Zule Zink Low Emission Flare	TBD

TBD = To Be Determined.

##### 2. Emission Limitations

- a. The Permittee shall not discharge into the atmosphere, from the emission unit (EU: W11), any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes. [AQR 26.1.1]
- b. The Permittee shall not allow the actual emissions from the flare to exceed the PTE listed in Table IV-A-2. The emission limits are normal operation (excluding startup and shutdown) limits only. [AQR 12.4.3.1(e)(10)]

**Table IV-A-2: PTE (tons per rolling 12-month)**

EU	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>x</sub>	CO	SO <sub>x</sub>	VOC	HAP	H <sub>2</sub> S
W11	8.92	8.92	13.12	31.49	53.85	5.88	0.56	0.43

##### 3. Operational Limitations

- a. The Permittee shall limit the actual throughput of the landfill gas to the enclosed combustor flare to 2,099,246,400 ft<sup>3</sup>/yr on a 12-month rolling basis (EU: W11). [AQR 12.4.3.1(e)(10)]

- b. The Permittee shall operate the 5,000 scfm enclosed combustor flare (EU: W11) to replace the 1,000 scfm Callidus flare (EU: W07) and 1,400 scfm candlestick flare (EU: G26). Upon commencement of operation of the 5,000 scfm flare (EU: W11), the Permittee shall decommission the 1,000 scfm flare (EU: W07) and 1,400 scfm flare (EU: G26) such that they may be regarded as inoperable. [AQR 12.4.3.1(e)(10)]

## **B CONTROL REQUIREMENTS**

1. The Permittee shall operate the enclosed combustor flare (EU: W11) to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million (ppm) by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in 40 CFR 60.754(d). [40 CFR 60.752(b)(2)(iii)(B)]
2. The Permittee shall operate the enclosed combustor flare (EU: W11) with the flame present at all times when the collected gas is routed to the flare. [40 CFR 60.753(f)]
3. The Permittee shall operate the enclosed combustor flare (EU: W11) at a minimum temperature of 1,600° F, or at a temperature that corresponds with at least 98 percent control efficiency of LFG obtained from the most recent performance test, [40 CFR 60.752(b)(2)(iii)(B)]
4. The Permittee shall operate the desulfurization system control device when the enclosed combustor flare is in operation. [AQR 12.4.3.1(e)(10)]
5. The Permittee shall operate and maintain the desulfurization system control device in accordance with the manufacturer's specifications. [AQR 12.4.3.1(e)(10)]
6. The Permittee shall operate the desulfurization system control device with control efficiency of 92.2% at all times. [AQR 12.4.3.1(e)(10)]
7. Except during periods of start-up, shutdown, or malfunction, the Permittee shall apply controls specified in this section. Periods of start-up, shutdown, and malfunction shall not exceed five (5) days for the collection system and shall not exceed one (1) hour for treatment and control devices. [40 CFR 60.755(e)]
8. The Permittee shall maintain a copy of the approved SSM plan dated 01/16/04 on site. Any revisions made to the SSM plan must be submitted to the Control Officer for review and approval prior to making the change. [40 CFR 63.1960 and 40 CFR 63.6(e)(3)(C)(viii)]
9. At all times, including periods of start-up, shutdown, and malfunction, the Permittee shall under all conditions, maintain and operate the source in a manner consistent with good air pollution control practice for minimizing emissions as required by 40 CFR 63.6(e)(3)(i). Determination of whether acceptable operation and maintenance procedures are being used shall be based on information available to the Control Officer which may include, but is not limited to, testing and monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 63.1960 and CFR 63.6(e)(1)(i)]

## **C MONITORING**

1. The Permittee shall conduct a daily visual emissions check for visible emissions from the enclosed combustor flare (EU: W11) while they are in operation. [AQR 12.4.3.1(e)(10)]

2. If the Permittee, during the visible emissions check, does not see any plume that, on an instantaneous basis, appears to exceed the opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, the location, and the results of the observation. *[AQR 12.4.3.1(e)(10)]*
3. If the Permittee sees a plume that, on an instantaneous basis, appears to exceed the opacity standard, the Permittee shall: *[AQR 12.4.3.1(e)(10)]*
  - a. take immediate action to correct causes of fugitive/stack emissions that appear to exceed allowable opacity limits; or
  - b. if practical, have a certified VE observer take an EPA Method 9 observation of the plume and record the results, and take immediate action to correct causes of fugitive emissions in excess of allowable opacity limits in accordance with 40 CFR 60 Appendix A: Reference Method 9.
4. Visible emissions checks do not require a certified VE observer, except where visible emissions appear to exceed the allowable opacity limit and exceed 30 seconds in duration, and an EPA Method 9 observation is made to establish it does not exceed the standard. *[AQR 12. 4.3.1(e)(10)]*
5. The Permittee shall monitor the time and date of operation of the desulfurization system control device. *[AQR 12. 4.3.1(e)(10)]*
6. The Permittee shall monitor the LFG throughput, in standard cubic feet, to the desulfurization system control device, and calculate monthly the annual volume as a 12-month rolling total. *[AQR 12. 4.3.1(e)(10)]*
7. The Permittee shall monitor the time and date of operation of the enclosed combustor flare (EU: W11). *[AQR 12. 4.3.1(e)(10)]*
8. The Permittee shall monitor the LFG throughput, in standard cubic feet, to the enclosed combustor flare (EU: W11), and calculate monthly the annual volume as a 12-month rolling total. *[AQR 12. 4.3.1(e)(10)]*
9. The Permittee shall calibrate, maintain, and operate according to the manufacturer's specifications the following equipment on the enclosed combustion flare (EU: W11): *[40 CFR 60.756(b)(1) and (2)]*
  - a. A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of  $\pm 1$  percent of the temperature being measured expressed in degrees Celsius or  $\pm 0.5$  degrees Celsius, whichever is greater.
  - b. A device that records flow to or bypass of the control device. The Permittee shall either:
    - i. install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
    - ii. secure the bypass line valve in the closed position with a car-seal or a lock-and key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.
10. The Permittee shall maintain a copy of the SSM plan on site. Failure to maintain a copy of the SSM plan is a deviation from the requirements of 40 CFR 63 Subpart AAAA. *[40 CFR 63.1960]*

## D TESTING

1. Performance testing for the enclosed combustor flare (EU: W11) and desulfurization system control device is subject to 40 CFR 60 Subpart A §60.8; 40 CFR Part 60 Subpart WWW and DAQEM's Guideline on Source Testing. [AQR 12.4.3.1(a)(9), 40 CFR Part 60 Subpart A and 40 CFR 60.754(d)]
2. The Permittee shall demonstrate initial compliance with the NMOC reduction requirements and H<sub>2</sub>S control efficiencies by conducting performance testing no later than 180 days after initial startup and within 60 days after achieving the maximum production rate at which the enclosed combustor flare will be operated. [AQR 12.4.3.1(a)(9) and 40 CFR 60.754(d)]
3. The Permittee shall submit for approval a performance testing protocol which contains testing, reporting, and notification schedules, test protocols, and anticipated test dates to the Control Officer not less than 45 nor more than 90 days prior to the anticipated date of the performance test. [12.4.3.1(a)(9)].
4. The Permittee shall conduct subsequent performance testing on the enclosed combustor flare (EU: W11) for NMOC reduction annually on or before the initial performance test date of the previous performance test. [AQR 12.4.3.1(a)(9)]
5. The Permittee shall demonstrate compliance with the 40 CFR 60 Subpart WWW standard by reducing NMOC by 98 weight-percent or by reducing the outlet concentration of NMOC to less than 20 ppmv for the enclosed combustor flare (EU: W11) in accordance with 40 CFR 60 Appendix A: Method 25, 25C, or 18. Method 3 or 3A shall be used to determine oxygen for correcting the NMOC concentration as hexane to 3 percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8 ppm NMOC as hexane), Method 25A should be used in place of Method 25. 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). [40 CFR 60.754(d)].
6. The Permittee shall demonstrate compliance with the desulfurization control device control efficiency in accordance with 40 CFR 60 Appendix A: Method 15 – Determination of Hydrogen Sulfide, Carbonyl Sulfide, and Carbon Disulfide Emissions from Stationary Sources. [AQR 12.4.3.1(a)(9)]
7. The Permittee shall submit a complete and comprehensive final performance test report to the Control Officer within 60 days from the end of each performance test. [AQR 12.4.3.1(e)(15)].

## E RECORD KEEPING

1. The Permittee upon commencement of operations shall retain, at minimum, the following information, various records, logs, etc.: [AQR 12.4.3.1(e)(10)]
  - a. dates and time when visible emissions checks are taken and the steps taken to make any necessary corrections to bring opacity into compliance;
  - b. monthly total 12-month throughput of LFG through the desulfurization system control device;
  - c. dates and times of operation of the desulfurization system control device;

- d. monthly total 12-month throughput of LFG through the enclosed combustion flare (EU: W11);
- e. dates and times of operation of the enclosed combustor flare (EU: W11);
- f. continuous monitoring records of the enclosed combustor flare temperature; and
- g. records of performance test results.

## **F REPORTING**

1. All report submissions shall be addressed to the attention of the Control Officer. [AQR 12.5.2.8(e)(4), 21.4, and 22.4]
2. All reports shall contain the following: [AQR 12.4.3.1(e)(9)]
  - a. A certification statement from the responsible official, i.e., "I certify that, based on information and beliefs formed after reasonable inquiry, the statements contained in this document are true, accurate and complete." (A sample form is available from DAQEM) and
  - b. A certification signature from a responsible official of the company and the date of certification.
3. The Permittee shall submit reports to the Control Officer every six months. [AQR 12.4.3.1(e)(10)]
4. The following requirements apply to semi-annual reports: [AQR 12.4.3.1(e)(10)]
  - a. The report shall include a semi-annual summary of each recorded item listed in Section IV-E-1 (b through e).
  - b. The report shall include summaries of any permit deviations, their probable cause, and corrective or preventative actions taken.
  - c. The report shall cover the semi-annual reporting period from January 1 through June 30 or the semi-annual reporting period from July 1 through December 31.
  - d. The report shall be received by DAQEM within 30 calendar days after the reporting period.
5. The Permittee shall submit annual emissions inventory reports based on the following: [AQR 18.6.1]
  - a. The annual emissions inventory shall be submitted to DAQEM no later than March 31 after the reporting year.
  - b. The annual emissions inventory report shall include the emission factors and calculations used to determine the emissions from each permitted emission unit, even when an emission unit is not operated.
6. This source is required to comply with the reporting and notification requirements of 40 CFR 60, Subpart WWW and 40 CFR 63, Subpart AAAA.
7. Pursuant to AQR Section 25, any upset/breakdown or malfunction that cause emissions of regulated air pollutants to exceed any limits set by regulation or by this permit, shall be reported to the Control Officer within 1 hour of the onset of such event. [AQR Section 25]

## **G OTHER REQUIREMENTS**

1. The Permittee shall provide the serial number for the 5,000 scfm John Zink enclosed combustor flare within 15 days after commencement of operation [AQR 12.4.3.1(e)(10)].

DRAFT