

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION  
FACT SHEET  
(Pursuant to NAC 445A.236)

**Permittee** 4G Properties Ltd  
30240 Rancho Viejo Rd Ste B  
San Juan Capistrano CA 92675

**Permit No.** NV0023671

**Facility** former Cappy's Cleaners  
4235 E Charleston Blvd  
(W of Lamb Blvd)  
36° 09' 32" N  
115 04' 58" W  
T21S R62E NW¼NW¼S5

**General** This permit is to accommodate pump and treat operations at this former dry cleaner site. The principal contaminant is PCE (see data section below). The major water treatment components are an air stripper followed by two carbon canisters in series. Discharge is to the storm drain on E Charleston Blvd, which is tributary to Las Vegas Wash. Site remedial activities are being conducted pursuant to the requirements of the Division's Bureau of Corrective Actions.

**Receiving Water Characteristics** The storm drain discharges to Las Wash, and the standards set at the nearest downstream control point, "Las Vegas Wash at Telephone Line Road" (NAC 445A.199), apply. In addition, the state wide standards for toxic materials, NAC 445A.144, are applicable, and Total Maximum Daily Loads (TMDLs) for Las Vegas Wash have been established for total phosphorus and ammonia.

**Rationale for Permit Requirements** The monitoring requirements, discharge limits, and a summary of the data submitted with the application are presented in the tables below and form the basis for the discussion that follows.

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Monitoring Requirements and Discharge Limitations

Parameter	Discharge Limitation	Monitoring Requirements		
		Sample Location	Frequency	Sample Type
Flow Rate	49,000 gpd <sup>1</sup>	-	continuous	meter
TPH (C6 - C40)	m&r, 1 mg/l <sup>2</sup>	i, ii	quarterly	discrete
EPA 8260 <sup>3</sup>	m&r	i, ii	quarterly	discrete
Total Trihalomethanes	100 µg/l	ii	quarterly	discrete
Trichloroethene (TCE)	5 µg/l	ii	quarterly	discrete
Tetrachloroethene (PCE)	5 µg/l	ii	quarterly	discrete
MTBE <sup>4</sup>	20 µg/l	ii	quarterly	discrete
Benzene	5 µg/l	ii	quarterly	discrete
Toluene	100 µg/l	ii	quarterly	discrete
Ethylbenzene	100 µg/l	ii	quarterly	discrete
Xylenes (total)	200 µg/l	ii	quarterly	discrete
Total Kjeldahl Nitrogen	m&r	ii	quarterly	discrete
Total Ammonia as N	m&r	ii	quarterly	discrete
Nitrite + Nitrate as N	m&r	ii	quarterly	discrete
Total Inorganic Nitrogen	m&r	ii	quarterly	discrete
Total Nitrogen	m&r	ii	quarterly	discrete
Total Phosphorus	m&r	ii	quarterly	discrete
pH	6.5 to 9 su	ii	quarterly	discrete
TDS	m&r	ii	quarterly	discrete
Metals <sup>5</sup>	m&r	ii	quarterly	discrete

i = influent to treatment system, ii = effluent from treatment system

m&r = monitor & report

1. Report average gpd per month
2. Limit applies to sample point ii
3. Full range, report all parameters. This will include the organics listed below this entry in the table.
4. Methyl tert-butyl ether
5. Analyses shall be for total metals and include include antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium, copper, fluoride, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, selenium, silver, thallium, zinc, and hardness as calcium carbonate.

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3/8/9 Samples

Parameter	Units	Result			Criteria
		MW15	MW18	MW20S	
[H] as CaCO <sub>s</sub>	mg/l	4700	6000	3700	-
Sb		0.014	0.027	<	0.146
As		<b>0.087</b>	<b>0.082</b>	<b>0.066</b>	0.05
Ba		0.75	0.69	0.078	2
Be		<	<	<	
B		<b>3.0</b>	<b>2.6</b>	<b>2.9</b>	0.75
Cd		<	<	<	
Ca		720	1100	490	-
Cr		0.025	0.052	0.0057	0.1
Cu		0.017	0.029	<	0.245 <sup>1</sup>
Fe		<b>9.2</b>	<b>26</b>	<b>1.0</b>	1
Pb		<	<	<	
Mg		710	790	590	-
Mn		<	<b>0.57</b>	<	0.2
Mo		<b>0.13</b>	<b>0.14</b>	<b>0.12</b>	0.019
Ni		0.0092	0.023	<	1.375 <sup>2</sup>
Se		<	<	<	
Ag		<	<	<	
Tl		<b>0.059</b>	<b>0.025</b>	<b>0.059</b>	0.013
Zn		0.015	0.050	<	3.140 <sup>3</sup>
TP		0.60	0.66	0.52	TMDL
NH <sub>3</sub> - N		<	<	<	
TKN		1.3	1.3	1.2	-
NO <sub>2</sub> - N		<	<	<	-
NO <sub>3</sub> - N		2.4	2.3	3.4	10
TN		3.7	3.6	4.6	-
fluoride		<	<	<	
GRO (C <sub>6</sub> - C <sub>12</sub> )		0.29	0.18	0.096	1
DRO (C <sub>12</sub> - C <sub>28</sub> )		0.4	<	<	1
ORO (C <sub>28</sub> - C <sub>40</sub> )		<b>1.0</b>	0.22	0.44	1
TPH		<b>1.69</b>	0.40	0.536	1
chloroform	µg/l	1.7	0.88	2.5	100 <sup>4</sup>
cis-1,2-dichloroethene		6.6	<	0.54	-
tetrachloroethene (PCE)		<b>900</b>	<b>510</b>	<b>150</b>	5
trichloroethene		44	14	14	-

1. [Cu] = 0.960exp{0.8545ln[H] - 1.702}/1000
2. [Ni] = 0.997exp{0.8460ln[H] + 0.0584}/1000
3. [Zn] = 0.986exp{0.8473ln[H] + 0.884}/1000
4. total trihalomethanes

FLOW, 49,000 gpd: Flow data is necessary for determining impacts to the receiving water from the various constituents present. The air stripper is rated at 20 gpm (28,800 gpd). The limit has been set at the top of the associated fee category to accommodate any operational changes.

TOTAL PETROLEUM HYDROCARBONS (TPH), (C6 - C40), 1 mg/l: This is a technology based limit. The analysis is included because it covers a wide range of potential pollutants, although its usefulness is limited

by relatively high detection limits. TPH is typically split up as: gasoline range organics (GRO) C6 - C12, diesel range organics (DRO) C12 - C28, and oil range organics (ORO) C28 - C40. Although the source of the components detected has not been determined, this shouldn't present a problem with respect to the discharge due to the high level of treatment provided.

EPA 8260, full range, report all parameters: Similar in purpose to the TPH analyses but with much lower detection limits. As can be seen from the table, PCE is the principal contaminant. The other limits are included as a precaution. Influent analyses have been included to provide information on aquifer conditions.

- TOTAL TRIHALOMETHANES, 100 µg/l: This is the toxics standard for the municipal or domestic supply beneficial use.
- TRICHLOROETHENE (TCE), 5 µg/l: This is the toxics standard for the municipal or domestic supply beneficial use.
- TETRACHLOROETHENE (perchloroethene - PCE), 5 µg/l: This is the Maximum Contaminant Level (MCL) for drinking water.
- METHYL TERT-BUTYL ETHER (MTBE), 20 µg/l: This limit is taken from the Corrective Action program, and is based on taste and odor considerations.
- BENZENE, 5 µg/l: This is the toxics standard for the municipal or domestic supply beneficial use.
- TOLUENE, 100 µg/l: Toluene is methyl benzene. This technology based limit is used instead of the toxics standard (14,300 µg/l) since it's easily achievable.
- ETHYLBENZENE, 100 µg/l: This technology based limit is used instead of the toxic standard (1,400 µg/l) since it's easily achievable.
- XYLENES (TOTAL), 200 µg/l: This is a technology based limit. Total xylenes consist of the three isomers of dimethyl benzene.

NITROGEN and PHOSPHORUS: These are included based on on potential inputs from leaking sewers and other sources. Limits aren't used in general because the limited occurrence wouldn't normally

justify the level of treatment required. Specie specific information follows.

TOTAL KJELDAHL NITROGEN (TKN), m&r: TKN is the sum of the organic forms plus ammonia, and it's needed as part of the determination of total nitrogen.

TOTAL AMMONIA (NH<sub>3</sub>/NH<sub>4</sub>) as N, m&r: The TMDL for ammonia is 970 lb/day. Ammonia was not detected.

NITRITE (NO<sub>2</sub>) + NITRATE (NO<sub>3</sub>): These are most often compared to the MCL for nitrate, 10 mg/l. Nitrite rapidly converts to nitrate in the environment. Nitrate was detected in each well at about 3 mg/l.

TOTAL INORGANIC NITROGEN (TIN), m&r: This is included because of the control point standard, 20 mg/l, which is based on existing quality. TIN is determined from the sum of separate analyses for nitrite/nitrate and ammonia.

TOTAL NITROGEN (TN), m&r: TN is determined from the sum of separate analyses for Kjeldahl, and nitrite/nitrate.

TOTAL PHOSPHORUS, m&r: The TMDL is 434 lb/day. At 28,800 gpd and 0.66 mg/l the contribution from this source would be 0.16 lb/day.

pH, 6.5 - 9.0, standard units: This is the control point standard, based on beneficial uses. Although not controlled by a treatment process, an excursion would represent some type of mishap and could be corrected fairly easily.

TDS, m&r: This is included because of existing salinity impacts in the Colorado River basin. The control point standard is 1900 mg/l, based on existing quality. The parameter is not limited based on natural occurrence, dilution, and difficulty of treatment.

METALS, monitor & report: These are of interest because of their environmental effects in general. As can be seen in the table, As, B, Fe, Mn, Mo, were all found at concentrations exceeding criteria. Although this could be problematic, they're not limited based on natural occurrence, dilution, and difficulty of treatment. Also, this initial condition is likely to change as pumping operations begin to move large quantities of water through the aquifer.

**Changes from the Previous Permit** This section is not applicable.

**Compliance History** This section is not applicable.

**Schedule of Compliance** An O & M manual is required by the six month anniversary of the effective date of the permit.

**Procedures for Public Comment** Notice of the Division's intent to issue discharge permit NV0023671 is being sent to the Las Vegas Review Journal for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit must submit written comments to the Division within (30) days of the publication date. The comment period can be extended at the discretion of the Administrator. The deadline for comments is 5:00 pm Monday May 25, 2009, although letters postmarked on that date will also be accepted.

A public hearing on the proposed determination can be requested by the applicant, any affected state or interstate agency, the Regional Administrator, or any interested agency, person, or group of persons. The request must be filed within the comment period and indicate the interest of the person filing the request and the reasons why a hearing is warranted. Public hearings granted by the Division are conducted in accordance with NAC 445A.238. The final determination of the Division may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

**Proposed Determination** The Division has made the tentative determination to issue the proposed discharge permit for a five year term.

Prepared by: Robert J Saunders  
Staff Engineer  
Bureau of Water Pollution Control  
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