| California Environmental Protection Agency | KAWASAKI HEAVY | EXECUTIVE ORDER M-1-319 |
|--|------------------|-------------------------|
| California Environmental Protection Agency | INDUSTRIES, LTD. | New On-Road Motorcycles |

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following 2001 model-year engine and emission control systems (ECS) produced by the manufacturer are certified as described below for four-stroke gasoline-powered motorcycles:

Engine Family Evaporative Family Displacement (cm³) Class ECS & Special Features

1KAXC.676AAA 1KAXE17.0A07 676 III PAIR

Vehicle Models (Equivalent Inertia Mass): EJ650-A3 (340 kg)

Production motorcycles shall be in all material respects the same as those for which certification is granted.

The exhaust emission standards and certification values in grams per kilometer for hydrocarbons (HC) and carbon monoxide (CO), and the HC evaporative (Evap) standard and certification value in grams per test for this engine/evaporative family are as follows. The designated HC standard shall be listed on the permanent tune-up label:

| | HC | CO | Evap HC |
|--------------------------------|-----|-----|-----------|
| Standard: (Effective Standard) | 1.0 | 12 | 2.0 (1.8) |
| Designated Standard: | 1.3 | n/a | n/a |
| Certification: | 0.8 | 10 | 0.6 |

BE IT FURTHER RESOLVED: That the designated HC standard shall be the exhaust limit for this engine family and cannot be changed during the model-year. It represents the HC exhaust emission standard applicable to this engine family for determining compliance with Title 13, California Code of Regulations, Sections 1958(b) and 2101.

BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Code of Regulations, Section 2035 et seq.).

BE IT FURTHER RESOLVED: That because the listed motorcycles are certified to 0.2 grams per test or more below the applicable evaporative emission standard, the vehicles are exempt from complying with the Air Resources Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" pursuant to Executive Order G-70-16-E.

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

Executed at El Monte, California this <u>3</u> day of January 2001.

R. B. Summerfield, Chief Mobile Source Operations Division

Page: 1 Issued: OCT 1 1 2000 Revised: E.O.#: M-1-319

Motorcycle Engine Family Information Form

1. Manufacturer: KAWASAKI HEAVY INDUSTRIES, LTD.

- Certification Contact Person, address, phone, and fax: Jeffrey D. Shetler / David Corey Kawasaki Motors Corp., USA. 9950 Jeronimo Road, Irvine. CA 92618-2084 Tel: 949-770-0400 Fax: 949-460-5602
- 3. Model Year: 2001
- Process Code: <u>New</u> (new, correction, revision, r/c, f/f. etc.)
- 5. Engine Family: <u>1KAXC.676AAA</u> 50s Engine Code: <u>—</u> 49s Engine Code: <u>—</u> Calif. Engine Code: <u>EJ650A-AC1</u>
- 6. Emission Control System: PAIR
- 7. Calif. Designated Standard: <u>1.3 gm/km</u>
- 8. Projected Annual Sales:
- New Technology ____ Yes X_ No If yes, cite the correspondence or reference the submittal document;

- 10. Displacement: <u>676cm³</u>
- 11. Number of Cylinders: 2
- 12. Cylinder Arrangement: Inline-2
- 13. Cylinder Head Configuration: SOHC
- 14. Type of Cooling: _Air_
- 15. Combustion Cycle: 4
- 16. Method of Aspiration: <u>Natural</u>
- 17. Fuel System: Carburetor
- 18. Number of Catalytic Converters: NA

19. Adjustable Parameters:

| Parameter(s) | Adjustable Range (or NA) | Tamper Resistance Method (or NA) | Method Approved |
|---|-----------------------------|---|-----------------|
| Air adjuster on carburetor (Air/Fuel Ratio) | NA | a tamper proof cap is placed over the adjusting screw. | Carry over |

20. AECDs In the Emission Control Systems:

| Exhaust System | | Evaporative System | |
|------------------|------|--------------------|------------------------------|
| AECDs In System: | PAIR | AECDs In System: | Sealed loop with Canister |
| | | | |

Page: 4 Issued: OCT 1 1 2000 Revised: E.O.#: M-1-319

Engine Family: <u>1KAXC.676AAA</u> Motorcycle Test Information Form

0.2

- 27. Are you carrying over test results from a previously certified family? X Yes No
 - a) If yes, indicate family name: <u>YKAXC.676AAA</u>
 - b) Is the family being certified identical to the family from which the data is being carried over? Yes

28. Model Designation of Test Vehicle: <u>EJ650-A2</u>

29. Test Information Number: 00-1

30. Vehicle ID: JKAEJEA13XA000015

31. Service Accumulation Duration: <u>15000</u> (km)

- 32. Maximum Rated Power: <u>37</u> kW @ <u>7000 RPM</u>
- 33. Displacement: <u>676</u> cc
- 34. Certification Fuel: Indolene: 91-95 RON
- 35. Test Data Set: Test 1
- 42. Exhaust Emission Deterioration Factors:

36. Road Load: 143.6 nt at 65 kph

- 37. Inertia Mass: 340 kg
- 38. N/V: <u>37.99</u>
- 39. EVAP. Bench Test Method Approved: Date: <u>2/23/1983</u>

Reference: <u>84ARB-03</u>

- 40. Unscheduled Maintenance: ___ Yes X No
- 41. If yes, Vehicle Log provided: <u>NA</u>

| | | Emission Values | |
|----------------|---------------------------|-------------------|-----------------------------|
| Test Number | System Kilometers | HC | CO |
| 1 | 3513 | 0.85 | 10.3 |
| 2 | 6012 | 0.66 | 10.2 |
| 3 | 6042 | 0.49 | 7.8 |
| 4 | 12013 | 0.77 | 7.7 |
| 5 | 12043 | 0.66 | 7.3 |
| 6 | 15012 | 0.76 | 10.2 |
| 7 | and the second second | | |
| Interpolated V | alues at <u>15000</u> km: | HC = <u>0.719</u> | <u>6</u> CO = <u>8.3981</u> |
| Extrapolated V | alues at <u>30000</u> km: | HC = 0.773 | 7 CO = 7.0784 |

| Regular DF | X |
|------------------|------|
| Modified DF | 1 |
| If different veh | icle |
| specify vehicle | ID |

43. Emission Test Results:

| Official Test Results | | Test 1 | Test 2 | Test 3 | Test 4 |
|--------------------------|-----------------|--------|--------|------------|--|
| g/km | СО | 10.2 | | | / |
| g/km | CO ² | 80.6 | | / | |
| g/km | HC | 0.76 | | / | |
| g/test | Evap. | 0.557 | | | |
| ertification Leve | ls: | | | the second | 1. |

| | Deterioration Factors |
|-----|--------------------------|
| (X) | 1.000 |
| | |
| (X) | 1.075 |
| (+) | 0.036 |

44. C

A

g/km

g/km

g/test



| pplication Processes by: | Joseph Je | gede Date: _ | 1/22/01 |
|--------------------------|-----------|--------------|---------|
| pplication Reviewed by: | | | |

10

0.8

0.55

CO

HC

Evap.

