AN ORDER OF THE CLEAN ENVIRONMENT COMMISSION UNDER THE CLEAN ENVIRONMENT ACT

RE: THE CLEAN ENVIRONMENT COMMISSION and ORLOFF ENTERPRISES LTD., Applicant

WHEREAS

pursuant to the provisions of The Clean Environment Act, Orloff Enterprises Ltd. filed an application with the department in connection with the continued operation of an existing plant for the smelting of aluminum by means of a pyrolysis furnace, located at or near 95 Higgins Avenue in the City of Winnipeg, Manitoba;

AND WHEREAS

in the absence of limits, terms and conditions prescribed by a regulation under the said Act, the application was referred to The Clean Environment Commission to prescribe limits, terms and conditions:

AND WHEREAS

after giving notice of the application and receiving notice of representation from persons likely to be affected by an order of the Commission concerning this matter, the Commission held a hearing in Winnipeg on the 17th day of April, 1984;

AND WHEREAS

the Commission considered the application on the 18th day of June, 1984, and again on the 18th day of September, 1984, following an inspection of the plant premises by the Commission and interested citizens who participated in the hearing;

IT IS HEREBY ORDERED THAT

- 1. The Applicant shall limit odour emissions to such an extent that, at any point of impingement off the site of the said operation, odours emanating from the said operation are not detectable:
 - (a) in a residential area or commercial area when one volume of odorous air is diluted with one equal volume of odour-free air;
 - (b) in an industrial area when one volume of odorous air is diluted with six equal volumes of odour-free air.

- The Applicant shall not cause or permit the emission of sound from any part of the said operation which, when measured in accordance with Appendix "A" to this Order, in a residential area, exceeds the following hourly equivalent continuous sound level limits:
 - (a) subject to (b):
 - (i) 60 dBA during the daytime hours of 7:00 a.m,. to 10:00 p.m., local time;
 - (ii) 50 dBA during the nighttime hours of 10:00 p.m. to 7:00 a.m., local time;
 - (b) when subjective evaluation or measurements indicate the intermittent or continuous noise has a significant impulsive character or predominant discrete tone:
 - (i) 55 dBA during the daytime hours of 7:00 a.m. to 10:00 p.m., local time;
 - (ii) 45 dBA during the nighttime hours of 10:00 p.m. to 7:00 a.m., local time.
- 3. The Applicant shall not cause or permit the emission of sound from any part of the said operation which, when measured in accordance with Appendix "A" to this Order in an industrial area or commercial area, is in excess of an $L_{eq}(1)$ of 70 dBA.
- 4. The Applicant shall limit the emission of the following contaminants from the said operation to such an extent that downwind ground level concentrations beyond the property line of the said operation are not in excess of the following limits:

| | Contaminant | Period of Time Contaminant is Measured | Concentration (Per Cubic Metre) | Parts of Pollutant Per One Million Parts of Air by Volume |
|-----|------------------|--|--|---|
| (a) | Sulphur Dioxide | 1-hour average 24-hour average Annual Arithmetic Mean | 900 micrograms 300 micrograms 60 micrograms | .34 .11 .02 |
| (b) | Nitrogen Dioxide | 1-hour average 24-hour average Annual Arithmetic Mean | 400 micrograms 200 micrograms 100 micrograms | .213 .106 .053 |

- 5. The Applicant shall not cause or permit visible emissions from any point of emission of the said operation that exhibit an opacity equal to or greater than:
 - (a) 20 percent for a period of more than 4 minutes in the aggregate in any one hour;
 - (b) 40 percent at any time.
- 6. The Applicant shall not cause or permit emission of particulate matter from any point of emission of the said operation in excess of 0.23 grams per standard cubic metre, corrected to 12 percent carbon dioxide for processes involving combustion.
- 7. The Applicant shall, on or before the 1st day of March, 1985, install stack sampling facilities on the pyrolysis furnace of the said operation, in a manner satisfactory to the Environmental Management Division; the said facilities shall include proper sampling ports, safe sampling platforms, safe access to the said sampling platforms, access to electrical power to operate the said sampling equipment and such additional sampling facilities as are requested by the said Division.
- 8. The Applicant shall ensure that a high standard of equipment maintenance and good housekeeping practices are carried out at all times consistent with meeting the requirements of this order.
- 9. In this Order:
 - (a) "impulsive sound" means hammering type sound having peaks one second or more apart, with less than 60 impacts per minute;
 - (b) "predominant discrete tone" means a sound having a one-third octave band sound level which, when measured in a one-third octave band, exceeds the arithmetic average of the sound levels of the two adjacent one-third octave bands on either side of such one-third octave band by:

- 9. (b) (i) 5 dBA for such one-third octave band with a centre frequency from 500 Hertz to 20,000 Hertz, inclusive, provided such one-third octave band sound level exceeds the sound level of each adjacent one-third octave band, or;
 - (ii) 8 dBA for such one-third octave band with a centre frequency from 160 Hertz to 400 Hertz, inclusive, provided such one-third octave band sound level exceeds the sound level of each adjacent one-third octave band, or;
 - (iii) 15 dBA for such one-third octave band with a centre frequency from 25 Hertz to 125 Hertz, inclusive, provided such one-third octave band sound level exceeds the sound level of each adjacent one-third octave band.

Order No. <u>1051</u>

Dated at the City of Winnipeg this 21st day of September, 1984.

Chairman,

The Clean Environment Commission.

File: 2594.0

NOISE LEVEL MEASUREMENTS

Noise level determinations, pursuant to Clauses 2 and 3 of this Order shall be based on measurements made as follows:

- (a) beyond the property line of Orloff Enterprises Ltd.;
- (b) excluding any significant interfering sounds from other sources; and
- (c) in terms of the equivalent continuous sound level averaged over a 1 hour period (60 consecutive minutes), using a sound level monitoring device which equals or surpasses the requirements of Canadian Standards Association Standard Z 107.1 - 1973 (or the equivalent) for Type 2 sound level meters, operated on the "A-weighting network" and "slow" meter response.