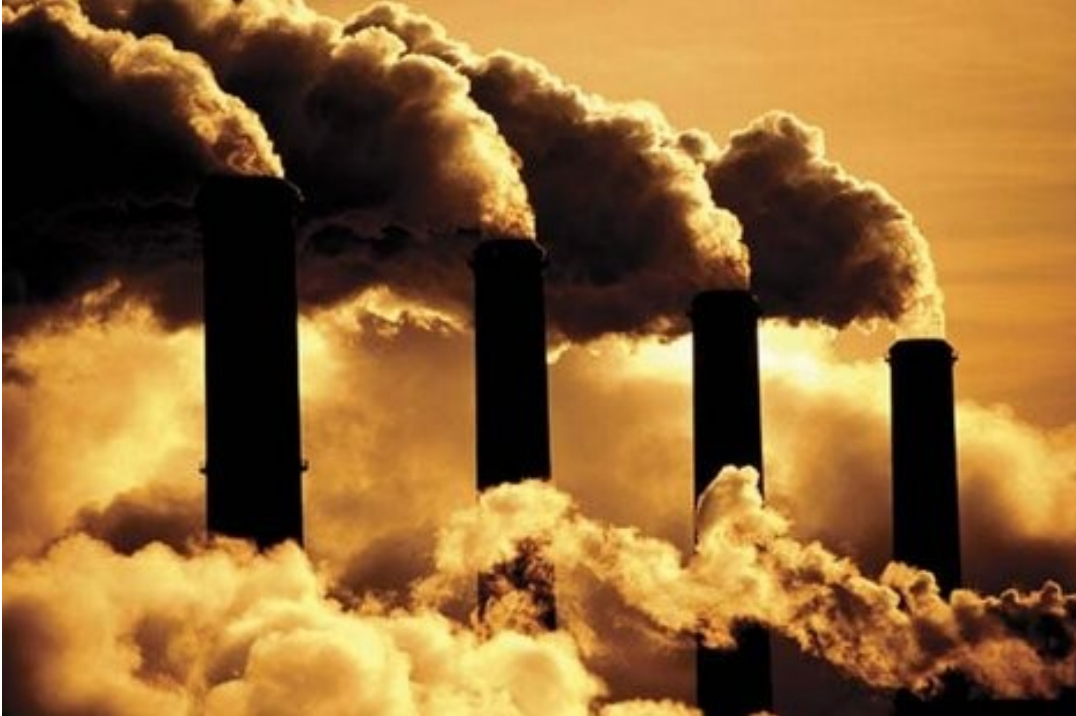




Atlantik Finanz AG

EXHIBIT-H AIR POLLUTION REGULATIONS IRAQ-ERBIL

Job No: 8831.503.593.89



110,000 bpd OIL REFINERY

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REV:01

CODE AND STANDARDS

ASME Code Section VIII Div-I	Pressure Vessels and Exchangers
API-500A	Area Classification-Petroleum Refineries
ANSI-B31.3	Petroleum Refinery Piping
API RP 520 Part I and II	Pressure Relieving Systems
ASME Section-I	Coils
ASTM SA 335 Pg	Tubes
ASTE and ASME SA 234	Fittings
SA 182 F9	Flanges
EPA 40 CFR 70.2	ENVIRONMENTAL IMPACT ASSESMENT
EPA 33 U.S.C 1251	WATER DISCHARGE CRITERIA (Pollutants)

API-650		P	STOCK/day	No of Tanks	R(mt)	h(mt)
bbl/day	m3/day	6.67	15.00			
30,000.00	4,500.00					
450,000.00	67,500.00					
225,000.00	33,750.00			2.00		
112,500.00	16,875.00			4.00		
75,000.00	11,250.00			6.00		
120,000.00	18,000.00			4.00	41.00	14.50
480,000.00	72,000.00		16.00			Less than 120,000 m3



Water Vapor	4.625 lbs/bbl (15.5 kg/metric ton)
Co2	13.68 lbs/bbl (45.92 kg/metric ton)
NOX	57.34 lbs/bbl (192.5 kg/metric ton)
SOX	0.009 lbs/bbl (0.03 kg/metric ton) per 1/10th of 1% sulfur in the fuel

IRAQ-ERBIL OIL REFINERY IS

Category A project

OIL PRODUCT TANKS



HAZARD CLASS-II FLASH POINT 21-55 C

CRUDE OIL TYPE	Results
RUSSIAN EXPORT BLEND CRUDE OIL (REBCO)	
Specifications Corresponding to GOST TU 39-1623-93:	
Density API at 30 degrees C	0.870
API Gravity	32.00
Viscosity at 80 C, Max	16.0
Flash Point (in locked cubicle) Max	35 C
Pressure of saturated vapor under 38 C kilopascal/mm mercury column	7.60
Paraffin (contents in %) 6.0 %	
Temperature of melting C -49	
Contents, %	
* Sulphur	1.8
* Nitrogen	0.25
* Charcoal-solids resin	0.9
* Asphaltenes	0.9
Salt	100 mg / L
Colloids	2.06
Ash	0.004
Distillate recovered	%
100°C	21.00
300°C	41.00
350°C	50.00
Slur and Sediments, Max	1.2

CRUDE OIL

**4X200.000 bbl FLOATING ROOF CRUDE OIL TANKS
R41-h14.60**

WASH WATER AND DRAINS



CRUDE OIL TANKS



WASH WATER AND DRAINS

**DESALTER BRINE DISCHARGE
30-130 gallons/hr/1000 bbl Crude**

WASH WATER AND DRAINS

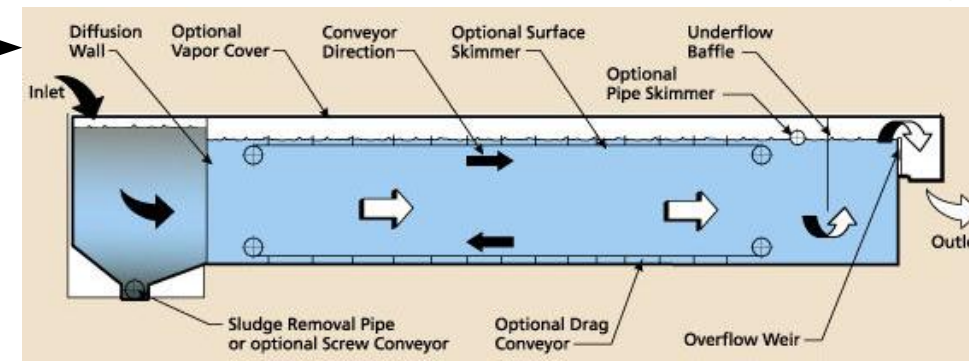
RAIL OR PIPE LINE



**CRUDE OIL
KIRKUK OR BASRAH**

**EQUATOR PRINCIPLES
Assessing and Managing Social and Environmental Risk
http://www.equator-principles.com/documents/Equator_Principles.pdf**

API SEPERATOR



CITY WASTE WATER SYSTEM



NON SCALE



Rev-3					
Rev-2					
Rev-1					
Rev	Description	Date	Name	Check	
	Date	Drawn	Check	Appr.	Scale
	2 Jan 2012	O.Songur	O.Songur	M.Karadeniz	NS

ERBIL-IRAQ REFINERY

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ENVIRONMENTAL IMPACT ASSESSMENT

Job No	Page	Symbol	Unit No	Cat	Type+Format	Serial No	Rev
8831	1/1	DWG	00	A	UD	0100.01	09



EXTRACTED FROM BELOW DOCUMENT TO SUMMARIZE AIR POLLUTION REGULATIONS



NOVA SCOTIA-CANADA

This consolidation is unofficial and is for reference only. For the official version of the regulations, consult the original documents on file with the [Registry of Regulations](#), or refer to the [Royal Gazette Part II](#).

Regulations are amended frequently. Please check the list of [Regulations by Act](#) to see if there are any recent amendments to these regulations filed with the Registry that are not yet included in this consolidation.

Although every effort has been made to ensure the accuracy of this electronic version, the Registry of Regulations assumes no responsibility for any discrepancies that may have resulted from reformatting.

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AIR QUALITY REGULATION

made under Section 112 of the

ENVIRONMENT ACT

S.N.S. 1994-95, c. 1

O.I.C. 2005-87 (February 25, 2005, effective March 1, 2005), N.S. Reg. 28/2005

as amended by O.I.C. 2009-342 (August 14, 2009), N.S. Reg. 261/2009



Citation

1 These regulations may be cited as the *Air Quality Regulations*.

Definitions

2 In these regulations,

- (a) "Act" means the *Environment Act*;
- (b) "Administrator" means a person appointed by the Minister under subsection 21(1) of the Act to administer these regulations, and includes an acting Administrator
- (c) "averaging period" in Schedule A means that period of time over which an arithmetic mean or geometric mean, as the case may be, is calculated;
- (d) "designated material" means a material described in Schedule B to these regulations;



(e) "facility" includes a petroleum refinery;

(ea) "fossil fuel" means a hydrocarbon deposit such as petroleum, coal or natural gas, derived from living matter of a previous geologic time and used for fuel;

Clause 2(ea) added: O.I.C. 2007-505, N.S. Reg. 392/2007.

(f) "heavy fuel oil" means petroleum residual fuel that is used in liquid-fuel-burning equipment;

(g) "Minister" means the Minister of Environment.

Ambient air quality criteria

- 3 (1)** The criteria for ambient air quality throughout the Province are prescribed in Schedule A and are expressed as maximum permissible ground level concentrations.
- (2)** An approval issued by the Minister or an Administrator must contain provisions to ensure that the maximum permissible ground level concentrations prescribed in Schedule A are not exceeded.



Burning offences

- 4 (1)** Except as provided in subsection (2) and except as provided in the *Used Oil Regulations*, a person must not carry out, cause, permit or be responsible for the burning of a designated material without prior written authorization from the Minister or an Administrator.



- (2) Subsection (1) does not apply to burning conducted by a person or organization that is authorized by the Province to conduct courses to train fire-fighting personnel.

Gasoline volatility limit

- 5 (1) In this Section, "motor gasoline" means gasoline intended for use as motor fuel.
- (2) The volatility limit for the vapour pressure of motor gasoline is 72 kPa.
- (3) During the period from May 15 to September 15 in each year, both dates inclusive,
- (a) a person who refines motor gasoline must not cause or permit any motor gasoline intended for use in the Province to leave the refinery if the motor gasoline's vapour pressure exceeds the volatility limit; and
 - (b) a person who imports into the Province any motor gasoline that has a vapour pressure that exceeds the volatility limit must not cause or permit
 - (i) the transfer of possession of the motor gasoline; or
 - (ii) the transfer of the motor gasoline from one container to another.
- (4) The vapour pressure of motor gasoline must be determined in accordance with
- (a) procedure *D 5191--01 Standard Test Method for Vapor Pressure of Petroleum Products (Mini Method)* prepared by the American Society for Testing Materials, as amended from time to time; or
 - (b) a procedure approved in writing by the Minister or an Administrator.

Provincial emission cap

- 6 (1) The Provincial annual sulphur dioxide emission cap is
- (a) effective April 11, 1995, 189 000 t;
 - (b) effective March 1, 2005, 141 750 t;
 - (c) effective January 1, 2015, 119 070 t;



Clause 6(1)(c) added: O.I.C. 2009-342, 261/2009.

(d) effective January 1, 2020, 70 875 t.

Clause 6(1)(d) added: O.I.C. 2009-342, 261/2009.

- (2) A person who owns, operates or is responsible for facilities that release emissions in excess of **90 tonnes of sulphur** dioxide per year in the aggregate must, not later than February 15 of each year or as otherwise directed by an Administrator, in a form specified by the Administrator, submit a report to the Minister or an Administrator on the sulphur throughput, noting the fuel usage, sulphur content and corresponding sulphur dioxide emissions for the previous calendar year from each facility owned or operated by, or under the responsibility of, the person.
- (3) Subject to subsection (4), annual sulphur dioxide, nitrogen oxide and mercury emission allocations are assigned to persons listed in Schedule C in the amounts set out in that Schedule.
- (3A) If persons assigned emission allocations listed in Schedule C transfer ownership of a fossil fuel-fired thermal power generating station, a corresponding portion of the emission allocation and associated monitoring and reporting requirements must be transferred to the new owner in accordance with subsection (3B).

Subsection 6(3A) added: O.I.C. 2007-505, N.S. Reg. 392/2007.

- (3B) Before ownership of a fossil fuel-fired thermal power generating station is transferred, the apportioning of its emission allocation and associated monitoring and reporting requirements must be approved in writing by the Administrator.

Subsection 6(3B) added: O.I.C. 2007-505, N.S. Reg. 392/2007.

- (4) For the purposes of achieving environmental quality standards and objectives in a cost-effective manner, compliance with an annual emission allocation assigned in Schedule C may be achieved by the inclusion of permits or allowances obtained under any emissions trading program established by the Minister under Section 15 of the Act or by an Administrator to whom the Minister has delegated the appropriate authority under Section 17 of the Act.
- (5) If the annual emission allocation assigned in Schedule C for a substance is exceeded, the person responsible must, unless exempted in writing by the Minister because of unusual and unavoidable circumstances,
 - (a) within the 3 years following the calendar year in which the excess emissions occurred, compensate for the excess emissions by reducing annual emissions



of the substance to a level below the annual allocation assigned for the substance in order to result in a total reduction of emissions of the substance equal to the amount of the excess emissions, in accordance with a plan submitted under clause (b) and approved by the Minister or an Administrator; and

- (b) not later than February 15 of the year following the calendar year in which the excess emissions occurred, submit a plan indicating how the excess emissions will be recovered to the Minister or an Administrator for approval.

Emission reduction plans

- 7 (1) A person who owns, operates or is responsible for facilities that existed in 2001 and that release emissions in excess of 90 tonnes of sulphur dioxide per year in the aggregate must submit to an Administrator an emission reduction plan demonstrating the proposed means to achieve sulphur dioxide emission reductions of 25% from 2001 levels by 2010 for facilities owned or operated by, or under the responsibility of, the person.
- (2) An emission reduction plan must be submitted not later than December 31, 2007, in accordance with specifications issued by the Minister or an Administrator.

Sulphur content of heavy fuel oil consumed in a facility other than a petroleum refinery

- 8 (1) Effective July 1, 2005, the sulphur content of heavy fuel oil consumed in a facility other than a petroleum refinery must not exceed
 - (a) 2.2% by mass; and
 - (b) 2.0% on an annual basis.
- (2) A person who owns, operates or is responsible for a facility that consumes heavy fuel oil must make available to an Administrator, upon request, a report noting fuel type and usage, sulphur content and corresponding average sulphur levels for heavy fuel oil consumed in the previous calendar year at each facility owned or operated by, or under the responsibility of, the person.

Sulphur content of total fuel consumed in a petroleum refinery

- 9 (1) Effective July 1, 2005, the sulphur content of the total fuel consumed in a petroleum refinery must not exceed
 - a. 2.2% by mass; and
 - b. 2.0% on an annual basis.



- (2) A person who owns, operates or is responsible for a petroleum refinery that consumes heavy fuel oil must make available to an Administrator, upon request, a report noting fuel type and usage, sulphur content and corresponding average sulphur levels for total fuel consumed in the previous calendar year at each refinery owned or operated by, or under the responsibility of, the person.

Reporting and records

- 10 (1) A person who is required to report under subsection 8(2) or subsection 9(2) must maintain all records of reported details for 5 years.
- (2) A person who acquires a facility that consumes heavy fuel oil must obtain and maintain the records retained under subsection (1) from the person from whom the facility was transferred.

Schedule A Maximum Permissible Ground Level Concentrations

Contaminant	Averaging Period	Maximum Permissible Ground Level Concentration	
		µg/m ³	pphm
Carbon Monoxide (CO)	1 hour	34 600	3000
	8 hours	12 700	1100
Hydrogen Sulphide (H ₂ S)	1 hour	42	3
	24 hours	8	0.6
Nitrogen Dioxide (NO ₂)	1 hour	400	21
	Annual	100	5
Ozone (O ₃)	1 hour	160	8.2
Sulphur Dioxide (SO ₂)	1 hour	900	34
	24 hours	300	11
	Annual	60	2
Total Suspended Particulate (TSP)	24 hours	120	-
	Annual	70*	-

* - geometric mean

µg/m³ - micrograms per cubic metre

pphm - parts per hundred million



Schedule B

Designated Materials

- (1) a tire
- (2) waste dangerous goods as defined in the *Dangerous Goods Management Regulations*
- (3) used oil as defined in the *Used Oil Regulations*
- (4) a railway tie or other wood treated with wood preservative
- (5) a material containing rubber or plastic
- (6) an asphalt shingle

Schedule C

Annual Sulphur Dioxide, Nitrogen Oxide and Mercury Emission Allocations for Nova Scotia Power Incorporated

1 Sulphur dioxide

- (1) Commencing in 1995, and in each year thereafter until March 1, 2005, the annual emissions of sulphur dioxide from fossil fuel-fired thermal power generating stations owned or operated by Nova Scotia Power Incorporated and affiliated companies must not in any calendar year exceed, in the aggregate, 145 000 t.
- (2) Effective March 1, 2005, and in each calendar year thereafter until December 31, 2009, the annual emissions of sulphur dioxide from fossil fuel-fired thermal power generating stations owned or operated by Nova Scotia Power Incorporated and affiliated companies must not in any calendar year exceed, in the aggregate, 108 750 t.
- (2) For the year 2005 only, the annual sulphur dioxide emissions cap allocated under item (2) may be prorated on the basis of the effective date of these regulations, as authorized in writing by the Minister.



- (4) Commencing in 2010, and in each calendar year thereafter, the annual emissions of sulphur dioxide from fossil fuel-fired thermal power generating stations owned or operated by Nova Scotia Power Incorporated and affiliated companies must not in any calendar year exceed, in the aggregate, 72 500 t.
- (5) Commencing in 2015, and in each calendar year thereafter, the annual emissions of sulphur dioxide from fossil-fuel-fired thermal power generating stations owned or operated by Nova Scotia Power Incorporated and affiliated companies must not in any calendar year exceed, in the aggregate, 60 900 t.

Subsection 1(5) added: O.I.C. 2009-342, N.S. Reg. 261/2009.

- (6) Commencing in 2020, and in each calendar year thereafter, the annual emissions of sulphur dioxide from fossil-fuel-fired thermal power generating stations owned or operated by Nova Scotia Power Incorporated and affiliated companies must not in any calendar year exceed, in the aggregate 36 250 t.

Subsection 1(6) added: O.I.C. 2009-342, N.S. Reg. 261/2009.

2 Nitrogen oxide

- (1) Commencing in 2009, and in each calendar year thereafter, the annual emissions of nitrogen oxides (NO_x) from fossil fuel-fired thermal power generating stations owned or operated by Nova Scotia Power Incorporated and affiliated companies must not in any calendar year exceed, in the aggregate, 21 365 t.
- (1A) Commencing in 2015, and in each calendar year thereafter, the annual emissions of nitrogen oxides (NO_x) from fossil-fuel-fired thermal power generating stations owned or operated by Nova Scotia Power Incorporated and affiliated companies must not in any calendar year exceed, in the aggregate, 19 228 t.

Subsection 2(1A) added: O.I.C. 2009-342, N.S. Reg. 261/2009.

- (1B) Commencing in 2020, and in each calendar year thereafter, the annual emissions of nitrogen oxides (NO_x) from fossil-fuel-fired thermal power generating stations owned or operated by Nova Scotia Power Incorporated and affiliated companies must not in any calendar year exceed, in the aggregate, 14 955 t.

Subsection 2(1B) added: O.I.C. 2009-342, N.S. Reg. 261/2009.

- (2) Commencing in 2010, and in each calendar year thereafter, a report must be submitted to the Minister or an Administrator noting the nitrogen oxide (NO_x) emissions for the previous calendar year from each fossil fuel-fired thermal power generating station owned or operated by Nova Scotia Power Incorporated and affiliated companies. The report must be submitted not later than February 15 of



each calendar year, or as otherwise directed by an Administrator, in a form specified by the Administrator.

3 Mercury

- (1) Commencing March 1, 2005, and in each calendar year thereafter until December 31, 2009, the annual emissions of mercury from the following coal-fired thermal power generating stations owned or operated by Nova Scotia Power Incorporated and affiliated companies must not in any calendar year exceed, in the aggregate, 168 kg:

Schedule C, subsection 3(1) replaced: O.I.C. 2007-505, N.S. Reg. 392/2007.

- (1A) Commencing January 1, 2010, and in each calendar year thereafter, the annual emissions of mercury from units in place and state as of October 11, 2006, within the coal-fired thermal power generating stations referred to in subsection (1) must not in any calendar year exceed, in the aggregate, 65 kg.

Schedule C, subsection 3(1A) added: O.I.C. 2007-505, N.S. Reg. 392/2007.

- (1B) If a unit in place and state as of October 11, 2006, within a coal-fired thermal power generating station referred to in subsection (1) is replaced with equivalent technology or any other steam-generating technology based on coal combustion, the unit must meet the standard for new facilities under the *Canada-Wide Standards for Mercury Emissions from Coal-Fired Electric Power Generation Plants*, endorsed by the Canadian Council of Ministers of the Environment, October 11, 2006, and is no longer included in the emission allocation of subsection (1A).

Schedule C, subsection 3(1B) added: O.I.C. 2007-505, N.S. Reg. 392/2007.

- (1C) Monitoring and testing of mercury emissions from coal-fired thermal power generating stations owned or operated by Nova Scotia Power Incorporated and affiliated companies must be conducted in accordance with a standard prescribed by the Administrator.

Schedule C, subsection 3(1C) added: O.I.C. 2007-505, N.S. Reg. 392/2007.

- (2) Commencing January 1, 2006, and in each calendar year thereafter, a report must be submitted to the Minister or an Administrator noting the mercury emissions for the previous calendar year from each coal-fired thermal power generating station owned or operated by Nova Scotia Power Incorporated and affiliated companies. The report must be submitted not later than February 15 of each year, or as otherwise directed by [an] Administrator, in a form specified by the Administrator.

Last updated: 27-08-2009 (will be updated before start any new project before submitting)