

EXPLANATORY NOTES ON INDUSTRIAL EFFLUENT REGULATIONS, 2009

Regulation No.	Short Title of Regulatory Provision	Notes
3	Application	<ul style="list-style-type: none"> • Applicable to all sources discharging effluent and mixed effluents based on load of BOD, SS as in SIERS 1979 • Mixed effluent is a combination of industrial effluent and sewage • Industrial effluent also includes wastewater from water treatment plant.
4	Notification	<ul style="list-style-type: none"> • The notification requirement replaces the written permission (KB) procedure in SIERS, 1979. A premise is required to notify DOE for: <ul style="list-style-type: none"> - new source - increase in production capacity resulting in increase in effluent quantity - IETS upgrading resulting in worsened effluent quality • Notification to be via Second Schedule, submitted within 30 days before construction begins
5	Specification on IETS	<ul style="list-style-type: none"> • The design of IETS needs to comply with the Guidance Document on Design and Operation of IETS. The IETS design and construction needs to be undertaken by professional engineers • Certification by professional engineers is required • As built drawings need to be submitted
6	Specifications on IETS	<ul style="list-style-type: none"> • The Guidance Document on Design and Operation of IETS specifies both aspects on the IETS design and operation. It is an offence to operate an IETS which does not comply with the stipulated operational characteristics. DG is also empowered to issue a directive to IETS which is not “specification – compliant”
7	Discharge Monitoring	<ul style="list-style-type: none"> • A premise needs to monitor the quantity and quality of effluent discharged on a weekly basis. Only the relevant parameters are to be monitored. Practically, one can determine what parameters are relevant to a particular premise, based on experience, raw materials and manufacturing process used and the guide given in the Guidance Document on Performance Monitoring. The monthly discharge report needs to be submitted to DOE on a monthly basis • See Tenth Schedule for Monthly Discharge Monitoring Report

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8	Proper operation of IETS	<ul style="list-style-type: none"> A premise needs to operate and maintain the IETS to ensure it is in good working condition. It is in good working condition if the operational characteristics of the IETS are maintained within the acceptable ranges. Although not spelt out in the Regulations, acceptable ranges are specified in the Guidance Document on Performance Monitoring 																												
9	Performance Monitoring	<ul style="list-style-type: none"> A premise needs to conduct performance monitoring of IETS according to Guidance Document on Performance Monitoring and provides facilities to enable it to conduct the performance monitoring 																												
10	Competent person	<ul style="list-style-type: none"> The operation of an IETS needs to be supervised by a competent person, who is certified by the DG (through the certification program executed by EiMAS) A competent person needs to be on duty anytime the IETS is in operation <p><u>Suggestion:</u> At the initial phase of the enforcement of IERS, 2009 “on duty” may be administratively understood to mean “can be reached/contacted by phone for consultation/advice on IETS operation”</p>																												
11	Discharge standard for industrial effluents for other parameters, with the exception of COD	<ul style="list-style-type: none"> See Fifth Schedule Same numerical values as in SIERS with additional parameters: formaldehyde, silver, aluminium, selenium, barium, fluoride, ammonia and colour 																												
12	COD discharge standard for industrial effluent	<ul style="list-style-type: none"> Sectoral standard for: <table style="margin-left: 40px; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"></th> <th style="text-align: center;">Standard:</th> <th style="text-align: center;">A</th> <th style="text-align: center;">B</th> </tr> </thead> <tbody> <tr> <td style="text-align: left;">(a) pulp and paper</td> <td></td> <td style="text-align: center;">80</td> <td style="text-align: center;">350</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">80</td> <td style="text-align: center;">250</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">80</td> <td style="text-align: center;">300</td> </tr> <tr> <td style="text-align: left;">(b) textile</td> <td></td> <td style="text-align: center;">80</td> <td style="text-align: center;">250</td> </tr> <tr> <td style="text-align: left;">(c) fermentation</td> <td></td> <td style="text-align: center;">400</td> <td style="text-align: center;">400</td> </tr> <tr> <td style="text-align: left;">(d) other industries</td> <td></td> <td style="text-align: center;">80</td> <td style="text-align: center;">200</td> </tr> </tbody> </table> 		Standard:	A	B	(a) pulp and paper		80	350			80	250			80	300	(b) textile		80	250	(c) fermentation		400	400	(d) other industries		80	200
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13	COD standard for mixed effluent	<ul style="list-style-type: none"> Mixed effluent is a combination of sewage and industrial effluent. COD standard imposed is the higher of the two i.e. standard A = 80 mg/L, standard B = 200 mg/L 																												
14	Best management practices	<ul style="list-style-type: none"> General provision to control certain parameters which do not have discharge limits but may be important to control in certain situation. Example include dioxin, chloride, sulfate, WET: etc 																												

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15	Contravention license	<ul style="list-style-type: none"> • Same as in SIERS, 1979
16	Method of effluent analysis	<ul style="list-style-type: none"> • An authorized officer can conduct: <ul style="list-style-type: none"> - In-situ test - Ex-situ test • The sample type is grab sample • Method of analysis: Standard methods and US-EPA approved methods (Fourth Schedule)
17	Discharge point	<ul style="list-style-type: none"> • Specifications of discharge point are given in Eleventh Schedule. A premise needs to file in the layout plan/engineering drawings of the discharge point 30 days before premise commences operation
18	Bypass	<ul style="list-style-type: none"> • Bypass is not allowed and is an offence
19	Dilution	<ul style="list-style-type: none"> • Almost similar to provision as in SIERS, 1979 • Dilution of effluent is not allowed
20	Spill & accidental discharge	<ul style="list-style-type: none"> • Largely similar to SIERS, 1979. New elements include: DG can specify how the spill is to be handles; may recover cost of clean up and damage cost
21	Prohibition of discharge of certain substances	<ul style="list-style-type: none"> • Same as in SIERS, 1979 with the addition of sludges
22	Licensed premise-making changes requires written permission	<ul style="list-style-type: none"> • Same as in SIERS, 1979
23	Disposal of sludge	<ul style="list-style-type: none"> • Disposal of sludge from manufacturing process, IETS or water treatment plant requires written permission from DG. This is to control the indiscriminate disposal of biological sludge, while sludges which are categorized as scheduled waste are controlled under SWRs 2005
24	Licensed premise-reporting change in information	<ul style="list-style-type: none"> • Same as in SIERS, 1979
25	Display of license	<ul style="list-style-type: none"> • Same as in SIERS, 1979
26	Licensed premise-continuance of existing conditions	<ul style="list-style-type: none"> • Same as in SIERS, 1979

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27	Maintenance of record	<ul style="list-style-type: none"> • A premise is required to maintain records of manufacturing processes, operation and performance monitoring of the IETS
28	Personnel training	<ul style="list-style-type: none"> • A premise is required to send the relevant staff for training and retraining in IETS operation and on other DOE's requirements. Record of staff training needs to be kept, especially if training is provided by training provider (in future)
29	Assistance during inspection	<ul style="list-style-type: none"> • Same as in SIERS, 1979. a premise is required to render assistance to DOE inspectors
30	Prohibition order	<ul style="list-style-type: none"> • DOE can issue a prohibition order to address undesirable occurrences. List of undesirable occurrences is given in Twelfth Schedule
31	License Fee	<ul style="list-style-type: none"> • License fee is RM500 plus effluent-related fee. Effluent related fee is to be submitted together with the license application. The amount of effluent related fee can be determined based on industrial effluent characterization on sludge (IECS)
32	Penalty	<ul style="list-style-type: none"> • Conviction through court action carries a maximum penalty of RM100,000 plus five years jail
33	Revocation of SIERS, 1979	<ul style="list-style-type: none"> • Licenses issued under SIERS, 1979 will still remain in force until they expire or revoked • Written permission (KB) will remain in force until revoked

Note: SIERS : Sewage and Industrial Effluents Regulations
 IERS : Industrial Effluent Regulations
 IETS : Industrial Effluent Treatment System
 SWR : Scheduled Waste Regulations

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