CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

MORTON INTERNATIONAL, INC.
NEWARK SALT MANUFACTURING FACILITY
ALAMEDA COUNTY

NPDES PERMIT NO. CA0005185
ORDER NO. R2-2005-0010

Consists of:
Part A (not attached)
Adopted August 1993

and

Part B (Attached)
Adopted: April 20, 2005
Effective: July 1, 2005

Note: Part A (dated August 1993), referenced in this Self-Monitoring Program is not attached but is available for review or download on the Board's website at
http://www.waterboards.ca.gov/sanfranciscobay/Download.htm

SELF-MONITORING PROGRAM, PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. EFFLUENT

Station	Description
E-001	At any point in the Discharger's wastewater ditch between the point at which the wastewater leaves the Discharger's property and the point at which all wastewater tributary to the ditch is present.

B. RECEIVING WATER STATION

Station	Description
C-1	The Alameda County Flood Control Ditch below the discharge weir.

C. LAND OBSERVATIONS

Station	Description
L-1 through L-1-n	Located along the perimeter levees of the two sludge ponds at equal distant intervals not to exceed 50 feet. (A sketch showing the locations of these stations shall accompany each report.)

II. SCHEDULE OF SAMPLING, ANALYSIS, AND OBSERVATION

Table 1. Schedule of Sampling, Measurement, and Analysis [1][2]

Station		E-001				C-1			L Stations	
Sample Type		G	C-24	Cont	O	G	C-24	O	G	O
Pollutant	**Notes**									
Flow (mgd)	[3]		D							
BOD_5 (mg/L and kg/day)			M							
TSS (mg/L and kg/day)			W							
Settleable Matter (mL/L-hr)		Q								
Oil and Grease (mg/L and kg/day)	[4]		M							
Turbidity (NTUs)		Q								
pH (pH units)				Cont						
Temperature (º F)				Cont						
Color (color units)					2/W					
Acute Toxicity (% survival)	[5]		Q							
Copper (µg/L and kg/day)			M							
Lead (µg/L and kg/day)			M							
Nickel (µg/L and kg/day)			M							
Selenium (µg/L and kg/day)			M							
Zinc (µg/L and kg/day)			M							
Cyanide (µg/L and kg/day)		2/Y								
Bis(2-ethylhexyl)phthalate (µg/L)		1/5Y								
2,3,7,8-TCDD and Congeners (µg/L)	[6]	A								
All priority pollutants (except those listed above)	[7]	In accordance with Provisions 2 and 3								
All applicable standard observations				M				M		M

Legend for Table 1:

Type of Sample
Co = continuous
C-24 = 24-hour composite
G = grab
Ob = observations

Type of Station
E = treatment plant effluent
C = Receiving Water
L = Pond Levee Stations

Frequency of Sampling
D = once each day
W = once each week
M = once each month
A = once each year (with at least 6-month intervals)
Q = once each calendar quarter
E = each occurrence
2/Y = twice per year
1/5Y = once every five years within 6 months before the due date for the application for permit reissuance

Footnotes for Table 1:

[1] Composite sampling: 24-hour composites may be made up of discrete grabs collected over the course of a day and volumetrically or mathematically flow-weighted. Samples for inorganic pollutants may be combined prior to analysis. Samples for organic pollutants should be analyzed separately. If only one grab sample will be

collected, it should be collected during periods of maximum peak flows. Samples shall be taken on random days when there are discharges into the receiving water body.

[2] Grab samples shall be collected coincident with composite samples collected for the analysis of regulated parameters.

[3] Flow monitoring: Effluent flow shall be measured continuously at Outfall E-001 and recorded and reported daily. For effluent flows, the following information shall also be reported, monthly:

Daily:	Daily Flow (MG)
Monthly:	Average Daily Flow (MGD)
Monthly:	Maximum Daily Flow (MGD)
Monthly:	Minimum Daily Flow (MGD)
Monthly:	Total Flow Volume (MG)

[4] Oil and grease: Each oil and grease sample event shall consist of a grab sample collected in a glass container.

[5] Bioassays:
a) Compliance with the acute toxicity effluent limits of this Order shall be evaluated by measuring survival of test organisms exposed to 96-hour static renewal bioassays.
b) Test organisms shall be rainbow trout and fathead minnow tested concurrently.
c) All bioassays shall be performed according to the "Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms" (currently 5th Edition).
d) Bioassays: Monitoring of the bioassay water shall include, on a daily basis, the parameters specified in the U.S. EPA-approved method, such as pH, dissolved oxygen, ammonia nitrogen, and temperature. These results shall be reported.
e) The Executive Officer may consider allowing compliance monitoring with only one fish species (the most sensitive of two) if the Discharger can document that the acute toxicity limitation (effluent limit B.4), has not been exceeded during the previous year (if less than four tests in a year due to no discharge, then the last four tests), or that acute toxicity has been observed in only one of two fish species.

[6] Chlorinated dibenzodioxins and chlorinated dibenzofurans shall be analyzed using the latest version of U.S. EPA Method 1613; the analysis shall be capable of achieving one-half of the U.S EPA MLs. Also, the Discharger shall participate as appropriate the regional collaborative effort with other dischargers to validate the 4-liter sample methodology for lowering the detection limit for dioxins. At a minimum, the Discharger is required to annually monitor for the life of this Order. Alternative methods of analysis must be approved by the Executive Officer.

[7] Receiving water monitoring shall be consistent with the Discharger's priority pollutant sampling and analysis plan.

Table 2 lists the MLs of the priority constituents included in Table 1. For compliance monitoring, analyses shall be conducted using the lowest commercially available and reasonably achievable detection levels. The objective is to provide quantification of constituents sufficient to allow evaluation of observed concentrations with respect to the MLs given below. All MLs are expressed as µg/L, approximately equal to parts per billion (ppb).

Table 2. Minimum Levels (µg/L or ppb)

CTR #	Constituent [1]	Types of Analytical Methods [2]											
		GC	GCMS	LC	Color	FAA	GFAA	ICP	ICP MS	SPG FAA	HYD-RIDE	CVAA	DCP
6.	Copper					25	5	10	0.5	2			1,000
7.	Lead					20	5	5	0.5	2			10,000
9.	Nickel					50	5	20	1	5			1,000
10.	Selenium						5	10	2	5	1		1,000
13.	Zinc					20		20	1	10			1,000
14.	Cyanide				5								
68.	Bis(2-ethylhexyl)Phthlate	10	5										
16.	2,3,7,8-TCDD-TEQ[3]												

[1] According to the SIP, method-specific factors (MSFs) can be applied. In such cases, this additional factor must be applied in the computation of the reporting limit. Application of such factors will alter the reported ML (as described in Section 2.4.1). Dischargers are to instruct laboratories to establish calibration standards so that the ML value is the lowest calibration standard.

[2] Laboratory techniques are defined as follows: GC = Gas Chromatography; GCMS = Gas Chromatography/Mass Spectrometry; LC = High Pressure Liquid Chromatography; Color = Colorimetric; FAA = Flame Atomic Absorption; GFAA = Graphite Furnace Atomic Absorption; Hydride = Gaseous Hydride Atomic Absorption; ICP = Inductively Coupled Plasma; ICPMS = Inductively Coupled Plasma/Mass Spectrometry; SPGFAA = Stabilized Platform Graphite Furnace Atomic Absorption (i.e., U.S. EPA 200.9); CVAA = Cold Vapor Atomic Absorption; DCP = Direct Current Plasma.

[3] The Board requires use of one-half the ML published in U.S. EPA Method 1613.

III. MODIFICATIONS TO PART A OF SELF-MONITORING PROGRAM

A. <u>If any discrepancies exist between Part A and Part B of the SMP, Part B prevails.</u>

B. <u>Modify Section F.1 as follows</u>:

Spill Reports

A report shall be made of any spill of oil or other hazardous material. The spill shall be reported by telephone as soon as possible and no later than 24 hours following occurrence or Discharger's knowledge of occurrence. Spills shall be reported by telephone as follows:

<u>During weekdays, during office hours of 8 am to 5 pm, to the Board.</u>
During non-office hours, to the State Office of Emergency Services:
Current telephone number: (800) 852–7550.

A report shall be submitted to the Board within five (5) working days following telephone notification, unless directed otherwise by Board staff. A report submitted by facsimile

transmission is acceptable for this reporting. The written report shall contain information relative to: . . .

C. Modify Section F.4 as follows:

Self-Monitoring Reports

For each quarter, a self-monitoring report (SMR) shall be submitted to the Board in accordance with the requirements listed in Self-Monitoring Program, Part A. The purpose of the report is to document performance, effluent quality and compliance with waste discharge requirements prescribed by this Order, as demonstrated by the monitoring program data and the Discharger's operation practices. The report shall be submitted to the Board on a quarterly basis, **by the first day of the second month after the quarter, on February 1, May 1, August 1, and November 1…**

[And add at the end of Section F.4.a the following:]

5) If the Discharger wishes to invalidate any measurement taken within the reporting period, the letter of transmittal for the reporting period in question shall include: a formal request by the Discharger to invalidate the measurement; the original measurement in question; the reason for invalidating the measurement; all relevant documentation that supports the invalidation (e.g., laboratory sheet, log entry, test results, etc.); and discussion of the corrective actions taken or planned (with a time schedule for completion), to prevent recurrence of the sampling or measurement problem. The invalidation of a measurement requires the approval of Board staff, and shall be based solely on the documentation submitted with the letter of transmittal.

D. Add at the end of Section F.5, Annual Reporting, the following:

d. A plan view drawing or map showing the Discharger's facility, flow routing and sampling and observation station locations.

E. Replace Sections E.1 and E.2 with the following:

1. Recording Requirements – Records to be Maintained

Written reports, electronic records, strip charts, equipment calibration and maintenance records, and other records pertinent to demonstrating compliance with waste discharge requirements including SMP requirements, shall be maintained by the Discharger in a manner and at a location (e.g., wastewater treatment plant or discharger offices) such that the records are accessible to Board staff. These records shall be retained by the Discharger for a minimum of 3 years. The minimum period of retention shall be extended during the course of any unresolved litigation regarding the subject discharges, or when requested by the Board or by the Regional Administrator of U.S. EPA, Region IX.

Records to be maintained shall include the following:

a. Parameter Sampling and Analyses, and Observations

For each sample, analysis, or observation conducted, records shall include the following:

1) Identity of the parameter.
2) Identity of the sampling or observation station, consistent with the station descriptions given in this SMP.
3) Date and time of the sampling or observation.
4) Method of sampling (grab, composite, other method).
5) Date and time the analysis was started and completed, and name of personnel or contract laboratory performing the analysis.
6) Reference or description of the procedure(s) used for sample preservation and handling, and analytical method(s) used.
7) Calculations of results.
8) Analytical method detection limits and related quantitation parameters.
9) Results of the analyses or observations.

b. Flow Monitoring Data

For all required flow monitoring (e.g., influent and effluent flows), records shall include the following:

1) Total flow or volume for each day.
2) Maximum, minimum, and average daily flows for each calendar month.

IV. ADDITIONS TO PART A OF SELF-MONITORING PROGRAM

Reporting Data in Electronic Format:

The Discharger has the option to submit all monitoring results in electronic reporting format approved by the Executive Officer. If the discharger chooses to submit the SMRs electronically, the following shall apply:

a. Reporting Method: The discharger shall submit SMRs electronically via the process approved by the Executive Officer in a letter dated December 17, 1999, Official Implementation of Electronic Reporting System (ERS).

b. Modification of reporting requirements: Reporting requirements F.4 in the attached Self-Monitoring program, Part A, dated August 1993, shall be modified as follows. In the future, the Board intends to modify Part A to reflect these changes.

c. Quarterly Report Requirements: For each calendar quarter, a self-monitoring report (SMR) shall be submitted to the Board in accordance with the following:

i. The report shall be submitted to the Board no later than the first day of the second month after the reporting period ends.

ii. Letter of Transmittal: Each report shall be submitted with a letter of transmittal. This letter shall include the following:

(1) Identification of all violations of effluent limits or other discharge requirements found during the monitoring period;

(2) Details of the violations: parameters, magnitude, test results, frequency, and dates;

(3) The cause of the violations;

(4) Discussion of corrective actions taken or planned to resolve violations and prevent recurrence, and dates or time schedule of action implementation. If previous reports have been submitted that address corrective actions, reference to such reports is satisfactory;

(5) If the Discharger wishes to invalidate any measurement taken within the reporting period, the letter of transmittal for the reporting period in question shall include: a formal request by the Discharger to invalidate the measurement; the original measurement in question; the reason for invalidating the measurement; all relevant documentation that supports the invalidation (e.g., laboratory sheet, log entry, test results, etc.); and discussion of the corrective actions taken or planned (with a time schedule for completion), to prevent recurrence of the sampling or measurement problem. The invalidation of a measurement requires the approval of Board staff, and shall be based solely on the documentation submitted with the letter of transmittal.

(6) Signature: The letter of transmittal shall be signed by the discharger's principal executive officer or ranking elected official, or duly authorized representative, and shall include the following certification statement:

"I certify under penalty of law that this document and all attachments have been prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

(7) Compliance evaluation summary: Each report shall include a compliance evaluation summary. This summary shall include the number of samples in violation of applicable effluent limits.

(8) Tabulations of all required analyses and observations, including parameter, sample date, sample station, and test result.

(9) If any parameter is monitored more frequently than required by this permit and SMP, the results of this additional monitoring shall be included in the monitoring report, and the data shall be included in data calculations and compliance evaluations for the monitoring period.

(10) Calculations for all effluent limits that require averaging of measurements shall utilize an arithmetic mean, unless specified otherwise in this permit or SMP.

V. MISCELLANEOUS REPORTING

A. The Discharger shall retain and submit (when required by the Executive Officer) the following information concerning the monitoring program for organic and metallic pollutants:

1. Description of sample stations, times, and procedures.

2. Description of sample containers, storage, and holding time prior to analysis.

3. Quality assurance procedures together with any test results for replicate samples, sample blanks, and any quality assurance tests, and the recovery percentages for the internal surrogate standard.

VI. SELECTED CONSTITUENTS MONITORING

A. Effluent monitoring shall include evaluation for all constituents listed in Table 1 by sampling and analysis of final effluent.

B. Analyses shall be conducted using the lowest commercially available and reasonably achievable detection levels. The objective is to provide quantification of constituents sufficient to allow evaluation of observed concentrations with respect to respective WQOs.

VII. MONITORING METHODS AND MINIMUM DETECTION LEVELS

The Discharger may use the methods listed in Table 2, above, or alternative test procedures that have been approved by the U.S. EPA Regional Administrator pursuant to 40 CFR 136.4 and 40 CFR 136.5 (revised as of May 14, 1999).

VIII. SELF-MONITORING PROGRAM CERTIFICATION

I, Bruce H. Wolfe, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Board Order No. R2-2005-0010.

2. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the Discharger, and revisions will be ordered by the Executive Officer.

3. Is effective as of July 1, 2005.

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BRUCE H. WOLFE
EXECUTIVE OFFICER