

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
ONE CONGRESS STREET- SUITE 1100 (CMA)
BOSTON, MASSACHUSETTS 02114 - 2023

FACT SHEET

DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES.

NPDES PERMIT NO. : MA 0003531

NAME AND ADDRESS OF APPLICANT:

Bird Incorporated D/B/A CertainTeed Corporation
1077 Pleasant Street
Norwood, Massachusetts 02062

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Bird Incorporated D/B/A CertainTeed Corporation
1077 Pleasant Street
Norwood, Massachusetts 02062

RECEIVING WATER: Neponset River

CLASSIFICATION: B (NEPO - 73)

I. Proposed Action, Type of Facility, and Discharge Location

The above named applicant has requested that the U.S. Environmental Protection Agency (EPA) reissue its NPDES permit to discharge into the designated receiving waters. The facility is engaged in the manufacture of fiber glass/asphalt roofing materials. The wastewater from this facility is discharged to the Neponset River and is comprised of process water, contact and non-contact cooling water, and storm water runoff.

II. Description of Discharge

Maps showing the location of the facility and the outfall location are attached as Figures 1 & 2.

III. Limitations and Conditions

The effluent limitations and monitoring requirements are found in the draft NPDES permit.

IV. Permit Basis & Explanation of Effluent Limitation Derivation

A. General Requirements

The Clean Water Act (CWA) prohibits the discharge of pollutants to waters of the United States without a National Pollutant Discharge Elimination System (NPDES) permit, unless such a discharge is otherwise authorized by the CWA. The NPDES permit is the mechanism used to implement technology and water quality based effluent limitations and other requirements including monitoring and reporting.

This draft NPDES permit was developed in accordance with various statutory and regulatory requirements established pursuant to the CWA and any applicable State regulations. The regulations governing the EPA NPDES permit program are generally found at 40 CFR Parts 122, 124, 125, and 136.

EPA is required to consider technology-based requirements, water quality-based requirements and all limitations and requirements in the current existing permit, when developing permit limits. These requirements are described in the following paragraphs.

A1. TECHNOLOGY-BASED REQUIREMENTS

40 CFR Part 125, Subpart A sets the criteria and standards that EPA must use to determine which technology-based requirements under Section 301(b) of the CWA and/or requirements established on a case-by-case basis under section 402 (a) (1) of the CWA, should be included in the permit. The Clean Water Act requires that all discharges, at a minimum, must meet effluent limitations based on the technological capability of the discharges to control pollutants in their discharge.

Technology based treatment requirements represent the minimum level of control that must be imposed under Sections 402 and 301(b) of the CWA (see 40 CFR §125 Subpart A). For existing sources, technology-based requirements according to best practicable control technology currently available (BPT) are applied for conventional, non-conventional, and toxic pollutants. More stringent technology-based requirements are applied through best conventional control technology (BCT) for conventional pollutants; and best available technology economically achievable (BAT) for toxic and non-conventional pollutants.

New source performance standards (NSPS) are applied to new sources, to control conventional, non-conventional, and toxic pollutants. EPA has not promulgated National Effluent Guide lines for storm water discharged from fiber glass/asphalt roofing materials. In the absence of published technology-based effluent guidelines, the Agency is authorized under Section 402 (a) 1 of the CWA to establish effluent limitations on a case-by-case basis using best professional judgement (BPJ). See 40 CFR §§125.3(c)(2) and (c)(3).

The factors to be considered in developing BAT limits are set forth at 40 CFR. §§125.3(c)(2) (i,ii) and 125.3 (d)(3) (i-vi), and include among other things, the age of existing facilities, engineering issues, process changes, non-water quality related environmental impacts and the cost of achieving required effluent pollutants reductions.

A2. WATER QUALITY-BASED REQUIREMENTS

Under Section 301(b)(1)(C) of the CWA and EPA regulations, NPDES permits must contain effluent limits more stringent than technology based limits where more stringent limits are necessary to maintain and achieve state or federal water quality standards.

Water quality standards consist of 3 parts: (1) beneficial designated uses for a water body or a segment of water body; (2) numeric and/or narrative water quality criteria sufficient to protect the assigned designated use(s); and (3) anti-degradation requirements to ensure that once a use is attained it will not be degraded. The Massachusetts Water Quality Standards, found at 314 CMR 4.00, include these elements. The State will limit or prohibit discharges of pollutants to surface waters to assure that surface water quality standards of the receiving waters are protected, and maintained or attained. These standards also include requirements for the regulation and control of toxic constituents and require that EPA criteria, established pursuant to Section 304(a) of the CWA, shall be used unless a site specific criteria is established.

The permit must limit any pollutant or pollutant parameter (conventional, non-conventional, toxic and whole effluent toxicity) that is or may be discharged at a level that causes or, has the “reasonable potential” to cause, or contribute to an excursion above any water quality standard (see 40 CFR § 122.44 (d). An excursion occurs if the projected or actual in-stream concentration exceeds an applicable water quality criterion. In determining “reasonable potential”, EPA considers: (1) existing controls on point and non- point sources of pollution; (2) pollutant concentration and variability in the effluent and receiving water as determined from the permit’s reissuance application, discharge monitoring reports (DMRs), and State and Federal Water Quality Reports; (3) sensitivity of the indicator species used in toxicity testing; (4) known water quality impacts of processes on waste waters; and (5) where appropriate, dilution of the effluent in the receiving water.

A3. STATE CERTIFICATION REQUIREMENTS

Under Section 401 of the CWA, EPA is required to obtain certification from the state in which the discharge is located which determines that all water quality standards, in accordance with Section 301(b) (1)(C) of the CWA, will be satisfied. Regulations governing state certification are set forth in 40 CFR § 124.53 and §124.55. EPA regulations pertaining to permit limits based upon water quality standards and state requirements are contained in 40 CFR §122.44 (d).

B. WATER QUALITY STANDARDS AND DESIGNATED USES

The Neponset River has been designated as Class B waters by the Massachusetts Department of Environmental Protection (MADEP). The Massachusetts Surface Water Quality Standards, 314 Code of Massachusetts Regulations (“CMR”) 4.05(3) (b) state that Class B waters have the following designated uses: *These waters are designated as habitat for fish, other aquatic life and wildlife and for primary and secondary contact recreation. Where designated they shall be as a source of public water supply with appropriate treatment. They shall be suitable for irrigation and other agricultural uses and for compatible industrial cooling and process uses. These waters shall have consistently good aesthetic value.*

Section 303 (d) of the CWA requires states to identify those water bodies that are not expected to meet water quality standards after the implementation of technology based controls and , as

such require the development of total maximum daily loads (TMDL). The 1998, 303 (d) report states that the Neponset River (Bird Pond), near the site, Segment MA 73002, Walpole, is not attaining water quality standards because of *Priority organics*.

C. Facility Information

Bird Incorporated D/B/A CertainTeed Company is a manufacturer of asphalt roofing products with operations which include the use of prefabricated raw materials (fiberglass rolls, heated asphalt, talc powder, latex paint) and municipal water supplied by the Massachusetts Water Resources Authority.

D. Proposed Permit Effluent Limitations and Conditions

The draft NPDES permit for Bird Inc. authorizes the discharge of process water and treated storm water, subject to effluent limitations which are within applicable water quality standards, and requires development and implementation of a storm water pollution prevention plan for additional protection of the environment. The effluent parameters in the draft permit are discussed in more detail below. The sections are divided according to the effluent characteristic being regulated.

Discharge # 001:

The flow from discharge 001 consists of treated contact cooling water from the roofing fabrication process. The roofing fabrication process consists of applying heated asphalt and limestone dust to fiberglass sheets, followed by application of pigmented rock granules to the exposure surface, and latex paint for nailing guides. Contact cooling water is used to keep the fiberglass sheets from sticking to equipment and to cool the final manufactured product.

The treatment process consists of sedimentation in two rectangular concrete sedimentation tanks. The sediment, consisting primarily of granules and limestone dust, is mechanically removed on a periodic basis. The facility has the capability to recycle a portion of the settled water for re-use as cooling water.

Flow

The existing permit authorizes the discharge of 40,000 gallons per day (GPD) of contact cooling through outfall # 001. DMR data submitted over the last 21 months is shown on Attachment C, and shows that the monthly average discharge has ranged from 11,514 to 32,591 GPD. The monthly average flow limit of 40,000 GPD is retained in the draft permit.

pH

The pH limits are based on the Massachusetts Surface Water Quality Standards, 314 Code of Massachusetts Regulations (“CMR”) 4.05(4)(b). These standards require the pH of the effluent discharge to Class B waters be in the range of 6.5 to 8.3 standard units. DMR data submitted over the last 21 months is shown on Attachment C, and shows that the pH has ranged from 6.5 to 7.8 standard units

Total Suspended Solids

The current permit contains a monthly limit of 40 mg/l and a maximum daily limit of 70 mg/l. These limits were based on Best Professional Judgement. The limits have been retained in the draft permit.

DMR data submitted over the last 21 months is shown on Attachment C, and shows that the monthly average TSS has ranged from <5 to 61 mg/l, and the daily maximum has ranged from <5 to 61 mg/l. For most months, only one TSS sample was taken (as allowed by the permit), so the values for monthly average and maximum daily are the same.

Temperature

The current limit is based on the State's (B) water quality criteria (314CMR 4.05(3)(b)(2), which states:

- a. *Shall not exceed 68°F (20°C) in cold water fisheries nor 83°F (28.3°C) in warm water fisheries and the rise in temperature due to the discharge shall not exceed 3°F (1.7°C) in rivers and stream designated as cold water fisheries nor 5°F (2.8°C) in rivers and streams designated as warm water fisheries (based on the minimum expected flow of the month); in lakes and ponds the rise shall not exceed 3°F (1.7°C) in the epilimnion based on the monthly average and maximum daily temperature; and*
- b. *natural seasonal and daily variations shall be maintained. There shall not be changes from background conditions that would impair any use assigned to this class. Including site specific limits to protect normal species diversity, successful migration, reproductive functions or growth of aquatic organisms.*

The existing average monthly temperature limit has been maintained to meet the State's in-stream temperature standards. The maximum daily limit of 90°F (32.3° C) has also been maintained. A delta (Δ)T analysis using a maximum temperature(90°F) at end of pipe and 7Q10 stream flow, predicts a change of water temperature after mixing zone of 2.96°F. The increase in temperature (Δ)T was found to be within the state's mixing zone requirements.

Explanation:

ΔT = Change in receiving water temperature
 Q_e = Effluent flow rate
 Q_r = Receiving water flow rate
 T_e = Temperature of effluent
 T_r = Temperature of receiving water

$$\Delta T_r = \frac{Q_e}{Q_r} (T_e - T_r); \quad T_r = \frac{1.547 \text{ cfs}}{3.66 \text{ cfs}} (90^\circ\text{F} - 83^\circ\text{F}); \quad T_r = 2.96^\circ\text{F}$$

DMR data submitted over the last 21 months is shown on Attachment C, the average and maximum temperature range shown is from 33 to 72 degrees Fahrenheit. The average and maximum daily temperatures are the same because only one sample per month was taken, as

allowed by the permit.

Aluminum

Reported high aluminum levels in the permit application was viewed by EPA as having reasonable potential to cause harm to the aquatic life of the receiving stream. A reporting requirement was added to the proposed permit to monitor this pollutant on a monthly basis.

Toxicity testing requirements

Toxicity testing requirements are based on State certification requirements under Section 401(a)(1) of the CWA, as described in 40 CFR 124.53 and 124.55. The LC50 = >100% limit will be repeated based on anti-backsliding requirements.

Monitoring data submitted over the last 7 quarters showed that all tests achieved the permit limit. Based on the data, the monitoring frequency and the species in the draft permit has been reduced to two times per year and one species respectively.

Discharge #002:

The application (Form 2C) lists: cleaning, cooling, dust control, and non contact cooling water from the Granule Processing Plant (GPP) as the operations which contribute to the effluent discharged through Outfall # 2 to the Neponset River.

Treatment of the process water consists of sedimentation in a detention basin. The total flow discharged to the sedimentation pond is less than 100,000 gallons per day (Information in Section II B.1 of the application indicates that total flow is about 90,000 GPD, information in Section V A 1.f. indicates that flow is about 100,000 gpd, and information in Figure 5 indicates that flow is about 35,000 gpd.). In any event, the company reports that no significant discharges from the sedimentation basin have been observed over the past 21 months, due to groundwater infiltration and evaporation.

TSS and pH

Monthly average total suspended solids limits of 20 mg/l and maximum daily limits of 30 mg/l are in the current permit and are included in the draft permit. These limits are maintained in the permit as required by antibacksliding regulations and will ensure that the discharge does not violate state water quality standards pertaining to solids (see 314 Code of Massachusetts Regulations (CMR) 4.05(3)(b)5.)

The pH limit are based on the Massachusetts Surface Water Quality Standards, 314 CMR 4.05(4)(b). These standards require the pH of Class B waters be in the range of 6.5 to 8.3 standard units.

Discharges #003 and # 004:

These discharges consist of storm water runoff from two tank farms, each treated by an oil/water separator. The permit application estimates the discharge flow through these outfalls is about

55,500 gallons per year for outfall # 003, and 114,300 gallons per year for outfall # 004. These estimates are based on meteorological data and the approximate area within the containment area of each tank farm.

The farms described in the application contain tanks storing heating oil in Farm 1 (Old Tank Farm), from which storm water discharges through outfall #003 and tanks storing asphalt for asphalt conditioning operations in Farm 2 (Blowstill Tank Farm), from which storm water discharges to outfall #004. Each tank farm is surrounded by a surface berm and is fitted with drainage piping that collects storm water and other contaminants into oil/water separators. The treated storm water is pumped through the oil/water separator into the facility's storm drain system which ultimately discharges into the Neponset River. Oil and grease, total suspended solids and pH have been regulated as indicated below:

Flow, Oil and grease, Total Suspended Solids and pH

These discharges are intermittent and occur only during precipitation events. The current permit requires that flow be reported, but contains no flow limits. Effluent data submitted by the permittee represents the total estimated flow from each outfall during each quarter based on total rainfall volume and the area draining to each oil/water separator. The permittee also reports the total flow for the month with the highest total flow during each quarter. DMR data submitted over the last 21 months is shown on Attachment C, and shows that the average monthly flow from outfall 003 was about 5,900 gallons, and the maximum month flow was about 9,800 gallons. The monthly average flow for outfall 004 was about 12,000 gallons and the maximum monthly flow was about 20,000 gallons. The draft permit requires continued flow monitoring, but has specified a different method than is currently used for measuring and reporting flow. Specifically, the draft permit requires that flow be reported only for the discharge events associated with the sampling of the outfall, and that the pumping rate and duration be used to estimate the flow, rather than the rainfall data. This method should produce flow data more representative of the actual discharge and will provide information to determine if effluent quality is a function of flow.

The maximum daily limit for oil and grease for both discharges is based on The Massachusetts Surface Water Quality Standards. These standards under 314 Code of Massachusetts Regulations ("CMR") 4.05(3)(b)(7), state: *These waters shall be free from oil, grease and petrochemicals that produce a visible film in the surface of the water, to impart an oil test in the water or an oily or other undesirable taste to the edible portions of aquatic life, coat the banks or bottom of the water course, or are deleterious or become toxic to aquatic life.* A concentration of 15 mg/L is recognized as the concentration at which many oils produce a visible sheen and /or cause an undesirable taste in edible fish (EPA Water Quality Criteria 1972). DMR data submitted over the last 21 months is shown on Attachment C, and shows that oil and grease results for outfall 003 have ranged from <5 to 9 mg/l. Results for outfall 004 have ranged from <5 to 34 mg/l.

Total suspended solids for both discharges are regulated to control the solids from the tank farm area during storm run-off events. The average monthly limit for TSS (10 mg/l) and the maximum daily limit (20 mg/l) have been repeated based on anti-backsliding regulations. DMR data submitted over the last 21 months is shown on Attachment C, and shows that TSS for outfall 003 have ranged from <5 to 12 mg/l. Results for outfall 004 have ranged from <5 to 11 mg/l.

The pH limit are based on the Massachusetts Surface Water Quality Standards,314 Code of Massachusetts Regulations (“CMR”) 4.05(4)(b). These standards require the pH of Class B waters be in the range of 6.5 to 8.3 standard units. DMR data submitted over the last 21 months is shown on Attachment C, and shows that pH for outfall 003 have ranged from 6.42 to 7.0 SU. Results for outfall 004 have ranged from 6.0 to 7.8 SU.

Storm Water Pollution Prevention Plan:

Pursuant to Section 304(e) of the CWA and 40 C.F.R. §125.103(b), Best Management Practices (BMPs) may be expressly incorporated into a permit on a case-by-case bases where necessary to carry out Section 402(a)(1) of the CWA.

This facility engages in activities which could result in the storm water discharge of pollutants to waters of the United States. These operations include at least one of the following from which there is or could be site runoff: material storage, in-facility transfer, material processing, material handling, or loading and unloading.

The permit requires this facility to update and maintain its Storm Water Pollution Prevention Plan (SWPPP), which will include BMPs appropriate for this specific facility to control storm water discharges from these and other activities which could contribute pollutants to waters of the United States through storm water.

The SWPPP becomes an enforceable element of the permit upon the effective date of the permit.

V. State Certification Requirements

The staff of the Massachusetts Department of Environmental Protection has reviewed the draft permit. EPA has requested permit certification by the state pursuant to 40 CFR 124.53 and expects that the draft permit will be certified.

VI. Public Comment Period, Public Hearing, and Procedures for Final Decision

All persons, including applicants, who believe any condition of the draft permit is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period, to the U.S. EPA, Massachusetts Office of Ecosystem Protection(CMA), One Congress Street, Suite 1100, Boston, Massachusetts 02114-2023. Any person, prior to such date, may submit a request in writing to EPA and the state agency for a public hearing to consider the draft permit. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held after at least thirty days public notice whenever the Regional Administrator finds that response to this notice indicates significant public interest. In reaching a final decision on the draft permit, the Regional Administrator will respond to all significant comments and make these responses available to the public at EPA's Boston office.

Following the close of the comment period, and after a public hearing, if such hearing is held, the Regional Administrator will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice.

VII. EPA Contact

Additional information concerning the draft permit may be obtained between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays from:

Victor Alvarez
Massachusetts Office of Ecosystem Protection - CMA
One Congress Street, Suite 1100
Boston, Massachusetts 02114 -2023
Telephone: (617) 918-1572

<u>03/19/04</u>	Linda M. Murphy, Director
Date	Office of Ecosystem Protection
	U.S. Environmental Protection Agency

ATTACHMENT B

COMPANY NAME: Bird Incorporated D/B/A Certaineed
NPDES PERMIT NUMBER MA 0003531
RECEIVING WATER: Neponset River

RIVER PROFILE:
HARDNESS : 70 mg/l (CaCO₃)
7Q10 FLOW (cfs): 3.66

PLANT FLOW (OUTFALL 001): monthly average permitted flow = 0.04 MGD = 0.062 cfs
maximum daily flow (from dmrs) = 0.109MGD = 0.168 cfs

Dilution Factor- The ratio of receiving water plus effluent flow to effluent flow at critical conditions.

CHRONIC DILUTION: $3.66 + 0.062 / .062 = 60$
ACUTE DILUTION: $3.66 + 0.168 / 0.168 = 23: 1$

EPA and MADEP Toxicity Strategy Category:
State Strategy: 20.1 - 100.1 = Medium low risk
Sampling Events/ year 4*
Toxicity Tests: Acute
No. of Species: 2*
Permit limits: LC50 = 100%

* Sampling events and number of species reduced to 2 and to 1 respectively, due to 100% compliance with toxicity requirements in the previous permit life.

ATTACHMENT C

MA0003531 BIRD, INC. D/B/A CERTAINTEED

OUTFALL 001, ROOFING MANUFACTURING OPERATIONS

WET -LC50, CERIODAPHNIA

	MO MIN
PERMIT LIMIT	100%
03/31/02	>100
06/30/02	>100
09/30/02	>100
12/31/02	>100
03/31/03	>100
06/30/03	>100
09/30/03	>100

WET - LC50, PIMEPHALES

	MO MIN
PERMIT LIMIT	100%
03/31/02	>100
06/30/02	>100
09/30/02	>100
12/31/02	>100
03/31/03	>100
06/30/03	>100
09/30/03	>100

TEMPERATURE, DEG. FAHRENHEIT

	MO AVE	DAILY MAX
PERMIT LIMIT	83	90
01/31/02	42	42
02/28/02	39.9	39.9
03/31/02	48	48
04/30/02	40	40
05/31/02	40	40
06/30/02	62	62
07/31/02	71	71
08/31/02	72	72
09/30/02	62	62
10/31/02	60	60
11/30/02	43	43
12/31/02	36	36
01/31/03	36	36
02/28/03	35	35
03/31/03	33	33
04/30/03	47.7	47.7
05/31/03	59	59
06/30/03	55	55
07/31/03	68	68

08/31/03	68	68
09/30/03	68	68

FLOW, GPD

	MO AVG	DAILY MX
PERMIT LIMIT	40000	

01/31/02	11573	26105
02/28/02	16631	28948
03/31/02	17533	27327
04/30/02	27032	72556
05/31/02	25325	79737
06/30/02	23770	58643
07/31/02	31259	108759
08/31/02	27404	56624
09/30/02	23351	44805
10/31/02	16329	33062
11/30/02	18869	46974
12/31/02	12055	27227
01/31/03	11514	35081
02/28/03	19934	33735
03/31/03	26987	44581
04/30/03	21976	46376
05/31/03	27028	47872
06/30/03	16616	22440
07/31/03	17079	41888
08/31/03	23776	39644
09/30/03	32591	50116

SOLIDS, TOTAL SUSPENDED, MG/L

	MO AVG	DAILY MX
PERMIT LIMIT	40	70

01/31/02	<5	<5
02/28/02	<5	<5
03/31/02	13	13
04/30/02	15	15
05/31/02	37	37
06/30/02	22	22
07/31/02	32	32
08/31/02	61	61
09/30/02	28.5	43
10/31/02	23	23
11/30/02	17	17
12/31/02	7	7
01/31/03	<5	<5
02/28/03	15	15
03/31/03	33	33
04/30/03	8	8
05/31/03	13	13
06/30/03	29	45
07/31/03	7	7
08/31/03	5	5

09/30/03 28 28

pH, SU

	MIN	MAX
PERMIT LIMITS	6.5	8.3
01/31/02	6.5	6.5
02/28/02	6.5	6.5
03/31/02	6.5	6.5
04/30/02	8.0	8.0
05/31/02	7.0	7.0
06/30/02	6.9	6.9
07/31/02	7.0	7.0
08/31/02	7.8	7.8
09/30/02	7.10	7.10
10/31/02	7.0	7.0
11/30/02	7.1	7.1
12/31/02	7.10	7.10
01/31/03	7.10	7.10
02/28/03	7.0	7.0
03/31/03	6.9	6.9
04/30/03	7.0	7.0
05/31/03	6.7	6.7
06/30/03	7.10	7.30
07/31/03	7.0	7.0
08/31/03	7.01	7.01
09/30/03	7.0	7.0

OUTFALL 002, DETENTION POND

FLOW, GPD

MO AVG DAILY MX

03/31/02	NO DISCHARGE
06/30/02	NO DISCHARGE
09/30/02	NO DISCHARGE
12/31/02	120* 360*
03/31/03	NO DISCHARGE
06/30/03	NO DISCHARGE
09/30/03	NO DISCHARGE

* ONE DISCHARGE OF 360 GALLONS DURING THE QUARTER OR 120 GALLONS PER MONTH

SOLIDS, TOTAL SUSPENDED, MG/L

MO AVG DAILY MX

PERMIT LIMIT 20 30

03/31/02	NO DISCHARGE
06/30/02	NO DISCHARGE
09/30/02	NO DISCHARGE
12/31/02	20 20
03/31/03	NO DISCHARGE

06/30/03 NO DISCHARGE
 09/30/03 NO DISCHARGE

pH, SU
 MINIMUM MAXIMUM
 PERMIT LIMIT 6.5 8.3

03/31/02 NO DISCHARGE
 06/30/02 NO DISCHARGE
 12/31/02 6.8 6.8
 03/31/03 NO DISCHARGE
 06/30/03 NO DISCHARGE
 09/30/03 NO DISCHARGE

OUTFALL 003, OIL/WATER SEPARATOR
FLOW, GALLONS

	TOTAL QUARTERLY	MAX MONTH
03/31/02	13887	4263
06/30/02	15879	7383
09/30/02	14297	5098
12/31/02	23335	6855
03/31/03	16714	6504
06/30/03	21094	9141
09/30/03	19072	9844

pH, SU
 MINIMUM MAXIMUM
 PERMIT LIMIT 6.5 8.3

	MINIMUM	MAXIMUM
03/31/02	6.5	6.5
06/30/02	7.0	7.0
09/30/02	7.0	7.0
12/31/02	6.8	6.8
03/31/03	6.42	6.42
06/30/03	6.5	6.5
09/30/03	6.9	6.9

SOLIDS, TOTAL SUSPENDED, MG/L
 MO AVE DAILY MAX
 PERMIT LIMITS 10 20

	MO AVE	DAILY MAX
03/31/02	<5	<5
06/30/02	12	12
09/30/02	9	9
12/31/02	<5	<5
03/31/03	8	8
06/30/03	<5	<5
09/30/03	<5	<5

OIL & GREASE, MG/L
DAILY MAX
PERMIT LIMIT 15

03/31/02	8
06/30/02	<5
09/30/02	9
12/31/02	<5
03/31/03	<5
06/30/03	<5
09/30/03	9

OUTFALL 004, OIL/WATER SEPARATOR
FLOW, GPD

	TOTAL QUARTERLY	MAX MONTH
03/31/02	28577	8772
06/30/02	32677	15193
09/30/02	29421	10490
12/31/02	48020	14108
03/31/03	34395	13384
06/30/03	43408	18810
09/30/03	39248	20257

pH, SU

	MINIMUM	MAXIMUM
PERMIT LIMIT	6.5	8.3
03/31/02	6.0	6.0
06/30/02	7.0	7.0
09/30/02	7.0	7.0
12/31/02	7.80	7.80
03/31/03	6.1	6.1
06/30/03	6.5	6.5
09/30/03	7.1	7.1

SOLIDS, TOTAL SUSPENDED, MG/L

	MO AVG	DAILY MX
PERMIT LIMIT	10	20
03/31/02	10	10
06/30/02	<5	<5
09/30/02	5	5
12/31/02	<5	<5
03/31/03	11	11
06/30/03	<5	<5
09/30/03	9	11

OIL & GREASE, MG/L
DAILY MX

PERMIT LIMIT 15

03/31/02	<5
06/30/02	<5
09/30/02	<5
12/31/02	<5
03/31/03	<5
06/30/03	<5
09/30/03	34