CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. 98-201

NPDES NO. CA0083127

WASTE DISCHARGE REQUIREMENTS FOR COOPER INDUSTRIES AMERICAN AIR CO., INC. AND CITY OF VISALIA FORMER McGRAW EDISON POWER SYSTEMS GROUNDWATER CLEANUP SYSTEM TULARE COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Board) finds that:

1. Cooper Industries (Cooper), a company incorporated in Ohio, submitted a Report of Waste Discharge, dated 22 April 1998, for permit renewal to continue its waste discharge under the National Pollutant Discharge Elimination System (NPDES).

2. McGraw Edison Power Company (McGraw Edison) utilized the site from 1957 to 1984 as a manufacturer of electrical transformers and hardware for line installation. McGraw Edison discharged process wastewater to an on-site unlined pond and disposed of solvents and paint sludge in a burn pit. The property is at 7533 Avenue 304, about four miles west of Visalia in Section 30, T18S, R24E, MDB&M, as shown in Attachment A, attached hereto and made part of this Order.

3. In October 1984, McGraw Edison sampled an on-site deep supply well and discovered purgeable hydrocarbons in the underlying groundwater. Results of the analyses indicated the presence of Trichloroethylene (TCE), Tetrachloroethylene (PCE), 1,1-Dichloroethane (1,1-DCA), 1,1-Dichloroethylene (1,1-DCE), trans-1,2-Dichloroethylene (trans-1,2-DCE), and 1,1,1-trichloroethane (1,1,1-TCA).

4. A geotechnical investigation conducted by Cooper in November 1986 found soil contamination by several volatile organics, including DCE, PCA, and 1,1,1-TCA, to a depth of 50 feet under a former pond and burn pit. A subsequent comprehensive soils investigation conducted in April 1991 showed no detectable levels of volatile organic compounds remain in the subsurface soil in the area of the former pond and burn pit.

5. Cooper purchased the site from McGraw Edison in 1985. On 1 January 1993, Cooper sold the property to Ruth and Ed Bueno and retained an easement to construct and operate a groundwater cleanup system on-site. American Air Co., Inc., a California corporation, purchased the property from Ruth and Ed Bueno on 1 January 1995.

6. Cooper conducted a groundwater investigation from 15 to 25 February 1993. Samples of polluted groundwater were collected and found to contain elevated concentrations of TCE, PCE, 1,1-DCA, 1,1-DCE, cis-1,2-DCE, Benzene, and Toluene.

7. Cooper has installed 13 groundwater monitoring wells and two recovery wells, which it operates to contain the plume of polluted groundwater beneath and in the vicinity of the property.

8. The groundwater cleanup system incorporates "best available technology economically achievable" (BAT) to treat the purgeable hydrocarbons. Cooper treats extracted groundwater using a packed tower aeration system prior to discharge into the City of Visalia (City) storm water pipeline. The storm water pipeline discharges to a nearby recharge pond owned by the City and known as the "Goshen Ocean," which is connected to Mill Creek by an overflow pipe. Discharge to Mill Creek is anticipated to occur only during significant storm events. Mill Creek, a water of the United States, discharges into Cross Creek, which flows to the Tule River during wet years.

9. The discharge to the storm water pipeline is at Latitude 36° 20' 23" and Longitude 119° 24' 20", identified as Discharge 001 in Attachment B, attached hereto and part of this Order. The storm water pipeline discharges to the Goshen Ocean at Latitude 36° 20' 23" and Longitude 119° 24' 36", identified as Discharge 002 in Attachment B. The Goshen Ocean discharges to Mill Creek Ditch at Latitude 36° 20' 10" and Longitude 119° 24' 32", identified as Discharge 003 in Attachment A. For the purpose of this Order, the receiving waters are the Goshen Ocean and Mill Creek.

10. Cooper, American Air Co., Inc., and the City of Visalia are hereafter jointly referred to as the 'Discharger'.

11. Cooper collects groundwater samples for analyses of a number of volatile organic compounds and submits groundwater quality reports annually. In 1997, the maximum concentrations of the organic constituents in the groundwater plume were as follows:

Constituents	Concentrations (µg/l)
Trichloroethylene (TCE)	528
Tetrachloroethylene (PCE)	95.4
1,1-Dichloroethane (1,1-DCA)	99.8
1,1-Dichloroethylene (1,1-DCE)	ND[1] (1.0)
cis-1, 2-Dichloroethylene (cis-1,2 DCE)	206
Benzene	ND[1] (0.20)

Constituents	Concentrations (µg/l)
Toluene	ND[1] (0.20)
Ethyl-benzene	ND[1] (0.20)
Total Xylenes	ND[1] (1.0)

[1] Nondetected, reported detection limits in the parentheses.

12. The Report of Waste Discharge describes the treated groundwater discharge as follows:

    Average flow: 63,360 gallons per day

    Design flow: 72,000 gallons per day

    Summer and Winter Temperatures: 23° and 18° C

Constituents	Units	Maximum Daily
BOD	mg/l	<1.0
COD	mg/l	5.4
Total Suspended Solids	mg/l	<4.0
Ammonia (as N)	mg/l	<1.0
pH	pH	8.5
Total Organic Carbon	mg/l	<1.0

    The maximum daily concentrations of the volatile organic compounds will be at or below the detection limits for the USEPA's 600 series method.

13. The Board adopted Waste Discharge Requirements Order No. 93-216 (NPDES No. CA0083127) on 22 October 1993. The permit expires in October 1998. The property ownership has changed; there has been no change in the discharge location, method of disposal, or wastewater characteristics.

14. The site lies within the Kaweah Delta Hydrologic Area (No. 558.10), as depicted on interagency hydrologic maps prepared by the Department of Water Resources in August 1986.

15. The City of Visalia provides sewage service to the area.

16. The U.S. Environmental Protection Agency (USEPA) and the Board have classified this discharge as a minor industrial discharge.

17. The *Water Quality Control Plan for the Tulare Lake Basin, Second Edition,* (hereafter "Basin Plan") designates beneficial uses, establishes water quality objectives, and contains implementation plans and policies for waters of the Basin. These requirements implement the Basin Plan.

18. Mill Creek Ditch and Cross Creek are Valley Floor Waters. The beneficial uses of valley floor waters within the subject hydrologic area (No. 558.10) are industrial and agricultural supply; water contact and non-contact water recreation; wildlife and warm water habitat; groundwater recharge; and preservation and enhancement of rare and endangered aquatic species.

19. The beneficial uses of the Tule River below Lake Success are municipal, agricultural, industrial service, and industrial process supply; water contact and non-contact water recreation; groundwater recharge; warm fresh water habitat; and wildlife habitat.

20. Depth to groundwater in monitoring wells has declined over the last 10 years from 53 to about 100 feet below ground surface (bgs). The decline is generally associated with overdraft of the regional aquifer for agricultural purposes and the lack of regional recharge due to the extended drought conditions a few years ago. Groundwater in the area flows to the southwest.

21. The beneficial uses of the underlying groundwater are municipal, industrial, and agricultural supply.

22. The site is on the alluvial fan of the Kaweah River. Sediments beneath the site consist of unconsolidated alluvial and fluvial deposits to a depth of at least 225 feet that include about five stratigraphic zones. The first stratigraphic zone is comprised of sands and silty sands to about 80 feet bgs. The second zone consists of sands and silty sands with fairly consistent layers of silty clay from 80 to 130 feet bgs. The third zone consists of silty clay to clay from 130 to 157 feet bgs. The forth zone consists of predominantly sandy sediments from 157 to 217 feet bgs. The fifth zone consists of silty clay to clay from 217 to 225 feet bgs.

23. Average precipitation and evaporation rates in the area are 12 and 77 inches per year, respectively.

24. In 1993, Cooper reported that the life expectancy of the groundwater cleanup system was more than ten years; the groundwater cleanup project was also estimated to be completed in more than 10 years. It is expected that the groundwater cleanup system will operate effectively and needs no major parts replacement for at least five years.

25. Effluent limitations and toxic effluent standards established pursuant to Sections 302, 303(d), 304, 306, 307, and 403 of the Clean Water Act (CWA) and amendments thereto that are applicable to the discharge are specified herein.

26. The USEPA adopted the National Toxic Rule (NTR) on 5 February 1993. The NTR requires effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause, or contribute to an in-stream excursion above a narrative or numerical water quality standard. The groundwater cleanup system removes the volatile organic constituents to concentrations below the detection limits; concentrations of the inorganic constituents are below the State's recommended primary and/or secondary maximum contaminant levels for drinking water. Based on the existing information, there is no constituent in the treated groundwater that may cause or contribute to an in-stream excursion above water quality objectives.

27. The permitted discharge is an ongoing discharge previously found consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Resources Control Board Resolution 68-16.

28. The action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of Division 13 of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.), in accordance with Section 13389 of the California Water Code.

29. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

30. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

31. This Order shall serve as an NPDES permit pursuant to Section 402 of the CWA, and amendments thereto, and shall take affect upon the date of hearing, provided EPA has no objections.

IT IS HEREBY ORDERED that Order No. 93-216 is rescinded and that Cooper Industries, American Air Co., Inc., the City of Visalia, and their agents, successors and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions:

1. Discharge of treated wastewater at a location or in a manner different from that described in Finding Nos. 8, 9, and 12 is prohibited.

2. The by-pass or overflow of untreated wastes to surface waters is prohibited, except as allowed by Standard Provision A.13.

3. The discharge of wastes at the facility, other than treated groundwater, is prohibited.

B. Discharge Specifications:

1. Effluent from the packed tower shall not exceed the following limits:

Constituents	Units	Daily Maximum
Trichloroethylene	µg/l	1.0
Tetrachloroehylene	µg/l	1.0
1,1-Dichloroethane	µg/l	1.0
1,1-Dichloroethylene	µg/l	1.0
cis-1,2-Dichloroethylene	µg/l	1.0
Ethylbenzene	µg/l	1.0
Benzene	µg/l	1.0
Toluene	µg/l	1.0
Xylene	µg/l	1.0
Other VOCs[1]	µg/l	1.0

[1] Other Volatile organic compounds.

2. The discharge shall not have a pH less than 6 or greater than 9.

3. The daily maximum discharge flow shall not exceed 0.072 million gallons.

C. Receiving Water Limitations:

Receiving water limitations are based upon water quality objectives contained in the Basin Plan. As such, they are a required part of this permit.

The discharge shall not cause the following in the receiving water:

1. Concentrations of dissolved oxygen to fall below 5.0 mg/l.

2. Oils, greases, waxes, or other materials to form a visible film or coating on the water surface or on objects in the water.

3. Oils, greases, waxes, floating material (liquids, solids, foams, and scums) or suspended material to create a nuisance or adversely affect beneficial uses.

4. Esthetically undesirable discoloration.

5. Toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.

6. Fungi, slimes, or other objectionable growths.

7. Turbidity to increase more than 20 percent over background levels.

8. The normal ambient pH to fall below 6.5, exceed 8.3, or change by more than 0.3 units.

9. Deposition of material that causes nuisance or adversely affects beneficial uses.

10. The normal ambient temperature to increase more than 2.8 °C (5°F).

11. Taste or odor-producing substances to impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or to cause nuisance or adversely affect beneficial uses.

12. Chemical constituents to be present in concentrations that adversely affect beneficial uses.

13. Aquatic communities and populations, including vertebrate, invertebrate, and plant species to be degraded.

14. In-stream toxicity.

15. Violations of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board pursuant to the CWA and regulations adopted thereunder.

D. Provisions:

1. The Discharger shall comply with the "Standard Provisions and Reporting Requirements (NPDES), "dated 1 March 1991", which are part of this Order. This attachment and its individual paragraphs are referred to as "Standard Provision(s)."

2. The Discharger shall comply with the attached Monitoring and Reporting Program No. 98-201, and any revisions thereto as ordered by the Executive Officer.

3. This Order expires on **23 October 2003** and the Discharger must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date in application for renewal of waste discharge requirements if it wishes to continue the discharge.

4. Cooper retains primary responsibility for compliance with this Order. American Air Co., Inc., as property owner, and the City of Visalia, as owner of the storm drain and recharge pond accepting discharge of treated wastewater, are secondary dischargers.

5. In the event of any change in control or ownership of land or waste discharge facilities described herein, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.

   To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Board, and a statement. The statement shall comply with the signatory paragraph of Standard Provision D.6 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code. Transfer shall be approved or disapproved by the Executive Officer.

6. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of this Order.

7. This Order shall serve as an NPDES permit pursuant to Section 402 of the Clean Water Act, or amendments thereto, and shall take effect upon the date of adoption, provided USEPA has no objections.

8. The Board will review this Order periodically and will revise requirements when necessary.

I, GARY M. CARLTON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 23 October 1998.

GARY M. CARLTON, Executive Officer

RA:ra/fmc:10/23/98

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 98-201

NPDES NO. CA0083127

FOR
COOPER INDUSTRIES
AMERICAN AIR CO., INC.
AND
CITY OF VISALIA
FORMER McGRAW EDISON POWER SYSTEMS
GROUNDWATER CLEANUP SYSTEM
TULARE COUNTY

Sampling and analytical procedures shall be in accordance with the U.S. Environmental Protection Agency's recommended procedures. Chain-of-custody forms shall be completed for each sample collected and copies provided to the Board with monthly monitoring reports.

INFLUENT MONITORING

Samples shall be collected at approximately the same time as effluent samples and should be representative of the influent. Influent monitoring shall include at least the following:

Constituent	Units	Type of Sample	Sampling Frequency[1]
1,1-Dichloroethane	µg/l	Grab	Quarterly
1,2-Dichloroethane	µg/l	Grab	Quarterly
1,1-Dichloroethylene	µg/l	Grab	Quarterly
cis-1,2-Dichloroehylene	µg/l	Grab	Quarterly
trans-1,2-Dichloroethylene	µg/l	Grab	Quarterly
Tetrachloroethylene	µg/l	Grab	Quarterly
1,1,1-Trichloroethane	µg/l	Grab	Quarterly
1,1,2-Trichloroethane	µg/l	Grab	Quarterly
Trichloroethylene	µg/l	Grab	Quarterly
Vinyl Chloride	µg/l	Grab	Quarterly

Constituent	Units	Type of Sample	Sampling Frequency[1]
Benzene	µg/l	Grab	Quarterly
Toluene	µg/l	Grab	Quarterly
Ethylbenzene	µg/l	Grab	Quarterly
Xylene	µg/l	Grab	Quarterly

EFFLUENT AND RECEIVING WATER MONITORING

Effluent samples should be representative of the volume and quality of the discharge. Receiving water samples collected in the Goshen Ocean near the storm water pipeline will be considered adequately composited. Time of collection of samples shall be recorded. Effluent and receiving water monitoring shall consist of the following:

Constituent	Units	Type of Sample	Station R1 Frequency	Station R2 Frequency[1]
1,1-Dichloroethane	µg/l	Grab	Monthly	Monthly
1,2-Dichloroethane	µg/l	Grab	Monthly	Monthly
1,1-Dichloroethylene	µg/l	Grab	Monthly	Monthly
cis-1,2-Dichloroehylene	µg/l	Grab	Monthly	Monthly
trans-1,2-Dichloroethylene	µg/l	Grab	Monthly	Monthly
Tetrachloroethylene	µg/l	Grab	Monthly	Monthly
1,1,1-Trichloroethane	µg/l	Grab	Monthly	Monthly
1,1,2-Trichloroethane	µg/l	Grab	Monthly	Monthly
Trichloroethylene	µg/l	Grab	Monthly	Monthly
Vinyl Chloride	µg/l	Grab	Monthly	Monthly

Constituent	Units	Type of Sample	Station R1 Frequency	Station R2[1] Frequency
Benzene	µg/l	Grab	Monthly	Monthly
Toluene	µg/l	Grab	Monthly	Monthly
Ethylbenzene	µg/l	Grab	Monthly	Monthly
Xylene	µg/l	Grab	Monthly	Monthly
pH	pH	Grab	Monthly	Monthly
Conductivity	µmhos/cm	Grab	Monthly	Monthly
Turbidity	NTUs	Grab	----------	Monthly
Dissolved Oxygen	mg/l	Grab	----------	Monthly
Total Daily Flow	gpd	Measured	Daily	----------

[1] Monitoring for station R2 is required only if a violation of effluent limits is observed during any sampling event of station R1. Sampling of station R2 will continue until effluent collected from station R1 is in compliance with effluent limitations contained in this Order for a minimum of three consecutive sample events.

Monitoring stations are defined as follows:

Station	Description
R1	A sampling point after discharge from the packed aeration power tower prior to discharge to the storm water pipeline.
R2	A sampling point near the storm water pipeline outfall into the recharge pond (Goshen Ocean).

In conducting the receiving water sampling, a log shall be kept of the receiving water conditions observed at Station R2. Attention shall be given to the presence or absence of:

a. Floating or suspended matter
b. Discoloration
c. Bottom deposits
d. Aquatic life
e. Visible films, sheens or coatings
f. Fungi,
g. Potential nuisance condition

Notes on receiving water conditions shall be summarized in the monitoring reports.

In reporting results for volatile organics, a complete list of all substances which are tested for and reported on by the testing laboratory shall be provided to the Board. Detection limits shall equal or be more precise than effluent constituent limits included in the adopted waste discharge requirements, or equal to EPA detection limits for the 600 series method, whichever is lower. If effluent monitoring detects a pollutant at a concentration greater than the daily maximum limit, the Discharger shall resample and reanalyze the discharge immediately after receiving knowledge of the exceedance. The frequency of sampling shall be increased to weekly until compliance is verified.

If the discharge is intermittent (discontinued for greater than 24 hours) rather than continuous, the Discharger shall monitor and record data for all of the above constituents on the first day of each discharge. The frequency of analysis shall be weekly for the duration of each intermittent discharge except during system shutdowns for normal maintenance unless they are more than 72 hours in duration.

REPORTING

Monitoring results shall be submitted to the Board by the **20th day of the month** following sample collection. Annual monitoring results shall be submitted by the **20th day of the month following each calendar year.**

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in a manner that clearly illustrates whether the discharge is complying with waste discharge requirements.

If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the calculation and reporting of the values required in the discharge monitoring report form. Such increased frequency shall be indicated on the discharge monitoring report form.

By **20 January of each year**, the Discharger shall submit a written report to the Executive Officer containing the following:

a. The names and telephone numbers of persons to contact regarding the groundwater cleanup system for emergency and routine situations.

b. A statement certifying when the flow meter and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration (Standard Provision C.6).

c. A statement certifying whether the current operation and maintenance manual, and contingency plan, reflect the groundwater treatment facility as currently constructed and operated, and the dates when these documents were last revised and last reviewed for adequacy.

The Discharger may also be requested to submit an annual report to the Board with both tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the compliance record. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.

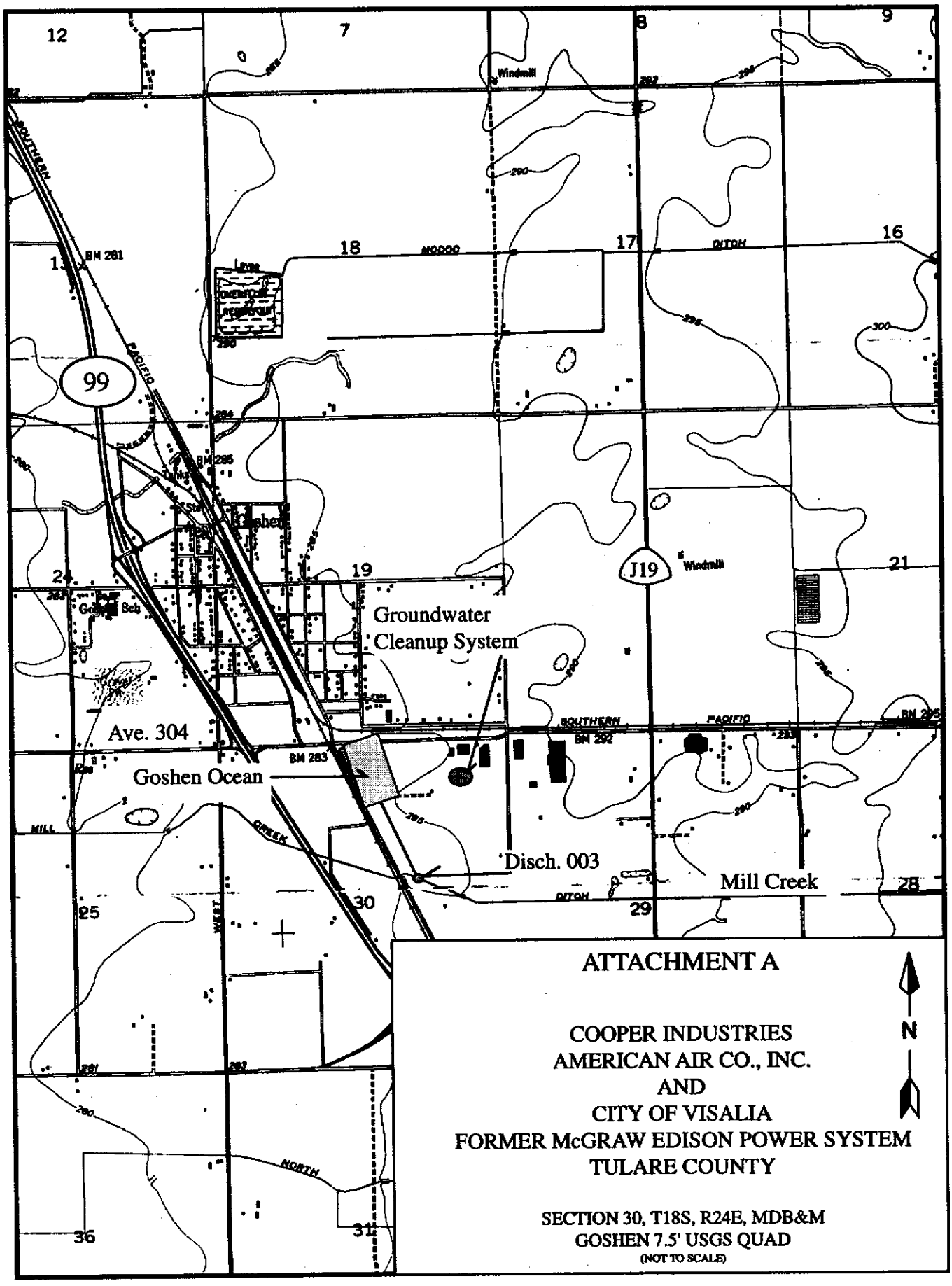
All reports submitted in response to the Order shall comply with the signatory requirements of Standard Provision D.6.

The Discharger shall implement the above monitoring program on the first day of the month following the effective date of this Order.

Ordered by: _____
GARY M. CARLTON, Executive Officer

23 October 1998
(Date)

RA:ra/fmc:10/23/98

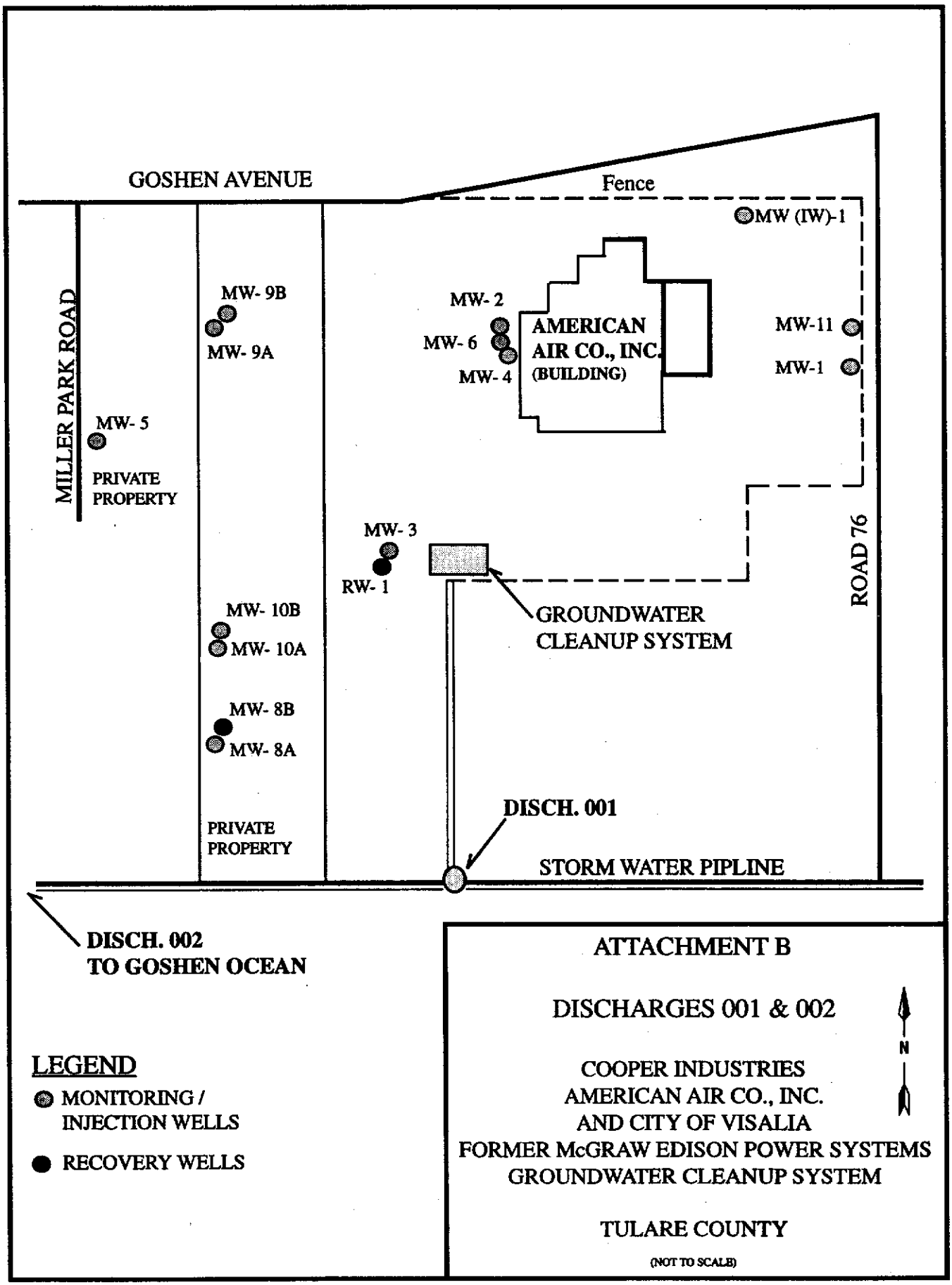


ATTACHMENT A

COOPER INDUSTRIES
AMERICAN AIR CO., INC.
AND
CITY OF VISALIA
FORMER McGRAW EDISON POWER SYSTEM
TULARE COUNTY

SECTION 30, T18S, R24E, MDB&M
GOSHEN 7.5' USGS QUAD
(NOT TO SCALE)

N


GOSHEN AVENUE
Fence
MW (IW)-1
MILLER PARK ROAD
MW- 9B
MW- 9A
MW- 2
MW- 6
MW- 4
AMERICAN AIR CO., INC. (BUILDING)
MW-11
MW-1
MW- 5
PRIVATE PROPERTY
MW- 3
RW- 1
ROAD 76
GROUNDWATER CLEANUP SYSTEM
MW- 10B
MW- 10A
MW- 8B
MW- 8A
DISCH. 001
PRIVATE PROPERTY
STORM WATER PIPLINE
DISCH. 002
TO GOSHEN OCEAN
LEGEND
MONITORING / INJECTION WELLS
RECOVERY WELLS
ATTACHMENT B
DISCHARGES 001 & 002
N
COOPER INDUSTRIES
AMERICAN AIR CO., INC.
AND CITY OF VISALIA
FORMER McGRAW EDISON POWER SYSTEMS
GROUNDWATER CLEANUP SYSTEM
TULARE COUNTY
(NOT TO SCALE)

In 1993, the USEPA adopted the National Toxic Rule (NTR). The NTR requires effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the potential to cause, or contribute, to an in-stream excursion above a narrative or numerical water quality standard. The groundwater cleanup system removes the organic pollutants to concentrations below the detection limit. Based on the existing information, there is no constituent in the treated groundwater that may cause or contribute to an in-stream excursion above water quality objectives. However, the Order includes receiving water limitations that prohibit in-stream toxicity.

Depth to the groundwater in the area is about 80 feet below ground surface (bgs). Regional groundwater flows to the southwest. Soils consist of unconsolidated alluvial and fluvial deposits to a depth of at least 225 feet bgs. Average precipitation and evaporation rates in the area are 12 and 77 inches per year, respectively.

The action to adopt an NPDES permit for this project is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.), in accordance with Section 13389 of the California Water Code.

RA:ra/fmc:10/23/98

INFORMATION SHEET

COOPER INDUSTRIES, ET AL.
GROUNDWATER CLEANUP SYSTEM
TULARE COUNTY

Cooper Industries (Cooper), a company incorporated in Ohio, submitted a Report of Waste Discharge, dated 22 April 1998, for permit renewal to continue its waste discharge under the National Pollutant Discharge Elimination System (NPDES).

McGraw Edison Power Company (McGraw Edison) utilized the site from 1957 to 1984 as a manufacturer of electrical transformers and hardware for line installation. McGraw Edison discharged process wastewater to an on-site unlined pond and disposed of solvents and paint sludge in a burn pit. In October 1984, McGraw Edison sampled an on-site deep supply well and discovered purgeable hydrocarbons in the underlying groundwater.

Cooper purchased the site from McGraw Edison in 1985. In 1993, Cooper sold the property to Ruth and Ed Bueno and retained an easement to construct and operate a groundwater cleanup system on-site. American Air Co., Inc. purchased the property from Ruth and Ed Bueno in January 1995.

Cooper conducted a groundwater investigation in early 1993 and found elevated concentrations of TCE, PCE, 1,1-DCA, 1,1-DCE, cis-1,2-DCE, Benzene, and Toluene. Cooper has installed 13 groundwater monitoring wells and two recovery wells to contain the plume of polluted groundwater beneath and in the vicinity of the property.

The groundwater cleanup system incorporates "best available technology economically achievable" (BAT) to treat the purgeable hydrocarbons. Cooper treats extracted groundwater using a packed tower aeration system prior to discharge into the City of Visalia (City) storm water pipeline. The pipeline discharges to a nearby recharge pond owned by the City and known as the "Goshen Ocean," which is connected to Mill Creek by an overflow pipe. Mill Creek, a water of the United States, discharges into Cross Creek, which flows to the Tule River during wet years.

Effluent limits are based on BAT and minimum cleanup levels that Cooper reports it can and has historically achieved with its treatment facility. Concentrations of the volatile organic constituents in the treated groundwater are below the detection limits specified in the USEPA's 600 series test methods; inorganic constituents in the effluent are below the State's recommended primary and/or secondary maximum contaminant levels for drinking water.

The proposed monitoring and reporting program, among other constituents, requires effluent monitoring for trans-1, 2-dichloroethylene, 1,2-dichloroethane, and vinyl chloride. The subject constituents were included in the monitoring program for their potential existence in the groundwater as breakdown products. The Order includes effluent limitations for the above-mentioned constituents under "other volatile organic compounds."