Planning $ 10.00	Drainage $ 0	BLDG PERMIT NO.
TCP $ 0	School Impact $ 0	FILE #

PLANNING CLEARANCE

(site plan review, multi-family development, non-residential development)

Grand Junction Community Development Department

257-193 THIS SECTION TO BE COMPLETED BY APPLICANT

BUILDING ADDRESS 202 Fourth Ave

TAX SCHEDULE NO. 2945-232-04-001

SUBDIVISION _____

SQ. FT. OF EXISTING BLDG(S) _____

FILING _____ BLK _____ LOT _____

SQ. FT. OF PROPOSED BLDG(S)/ADDITONS 112

OWNER KC ASPHALT LLC

MULTI-FAMILY:
NO. OF DWELLING UNITS: BEFORE — AFTER — CONSTRUCTION

ADDRESS 202-4th AVE

NO. OF BLDGS ON PARCEL: BEFORE — AFTER — CONSTRUCTION

CITY/STATE/ZIP GRAND JUNCTION, CO 81501

USE OF ALL EXISTING BLDG(S) Warehouse / Tanks

APPLICANT Tracy Bryan

ADDRESS 202-4th AVE

DESCRIPTION OF WORK & INTENDED USE: _____

CITY/STATE/ZIP GRAND JUNCTION, CO 81507 INSTALL ODOR ABATEMENT SYSTEM

TELEPHONE 970 241-1135

Submittal requirements are outlined in the SSID (Submittal Standards for Improvements and Development) document.

THIS SECTION TO BE COMPLETED BY COMMUNITY DEVELOPMENT DEPARTMENT STAFF

ZONE I-2

LANDSCAPING/SCREENING REQUIRED: YES ____ NO X

SETBACKS: FRONT: 25' from Property Line (PL) or _____ from center of ROW, whichever is greater

PARKING REQUIREMENT: N/A

SIDE: 0' from PL REAR: 18' from PL

SPECIAL CONDITIONS: only installing a 112 sq ft bunker

MAX. HEIGHT 40'

MAX. COVERAGE OF LOT BY STRUCTURES N/A

Modifications to this Planning Clearance must be approved, in writing, by the Community Development Department Director. The structure authorized by this application cannot be occupied until a final inspection has been completed and a Certificate of Occupancy has been issued by the Building Department (Section 307, Uniform Building Code). Required improvements in the public right-of-way must be guaranteed prior to issuance of a Planning Clearance. All other required site improvements must be completed or guaranteed prior to issuance of a Certificate of Occupancy. Any landscaping required by this permit shall be maintained in an acceptable and healthy condition. The replacement of any vegetation materials that die or are in an unhealthy condition is required by the Grand Junction Zoning and Development Code.

Four (4) sets of final construction drawings must be submitted and stamped by City Engineering prior to issuing the Planning Clearance. One stamped set must be available on the job site at all times.

I hereby acknowledge that I have read this application and the information is correct; I agree to comply with any and all codes, ordinances, laws, regulations, or restrictions which apply to the project. I understand that failure to comply shall result in legal action, which may include but not necessarily be limited to non-use of the building(s).

Applicant's Signature _____ Date 2/28/07

Department Approval SLC Date 2/28/07

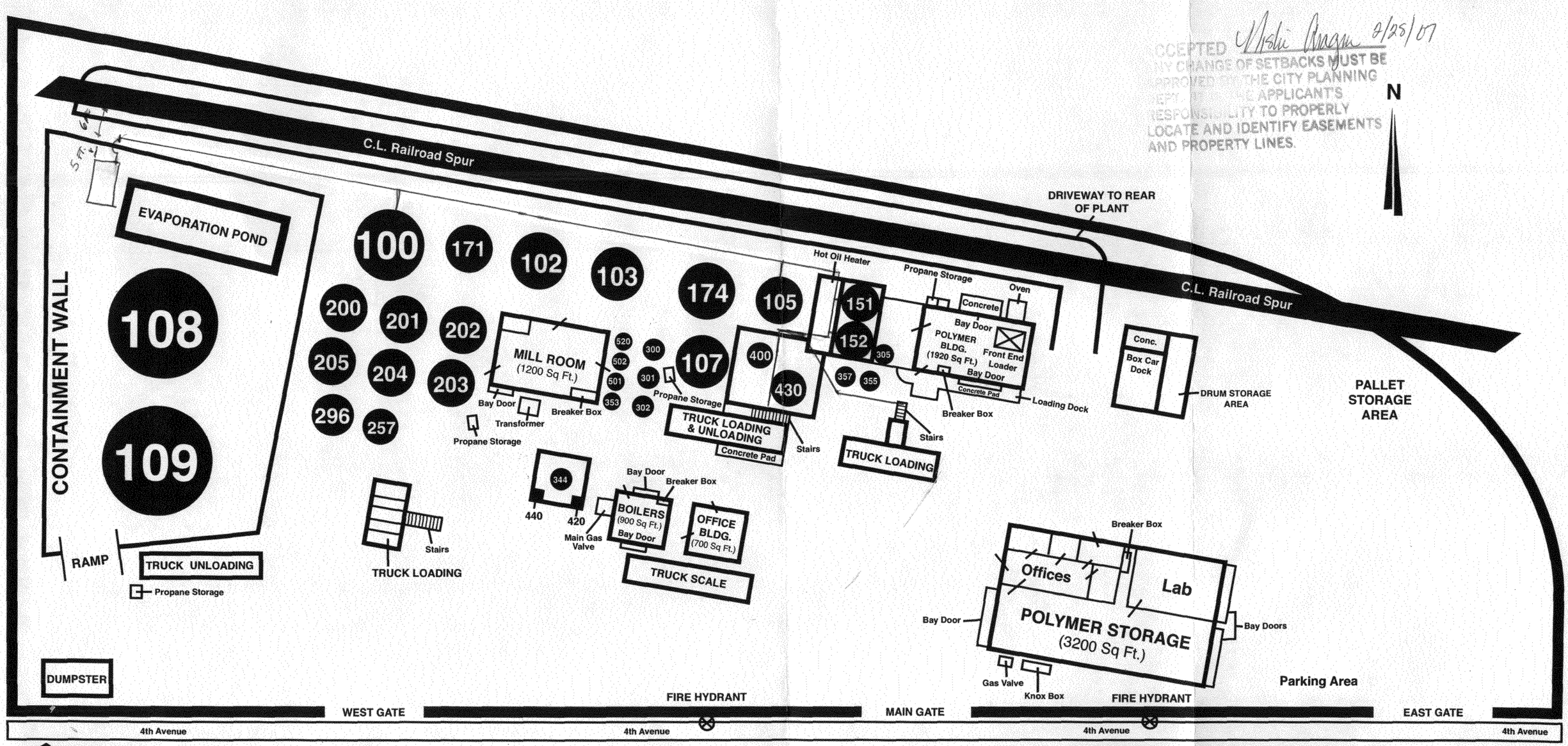
no sewer billing

Additional water and/or sewer tap fee(s) are required:	YES	NO ✓	W/O No. 257-193
Utility Accounting Kate Ebberwein			Date 2/28/07

VALID FOR SIX MONTHS FROM DATE OF ISSUANCE (Section 2.2.C.1 Grand Junction Zoning and Development Code)

(White: Planning) (Yellow: Customer) (Pink: Building Department) (Goldenrod: Utility Accounting)

ACCEPTED Leslie Braga 9/25/07
ANY CHANGE OF SETBACKS MUST BE APPROVED BY THE CITY PLANNING DEPT. IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY LOCATE AND IDENTIFY EASEMENTS AND PROPERTY LINES.



SemMaterials™

SEM MATERIALS LP

202 4th Avenue • Grand Junction, Colorado 81501 • 970/241-1135

HAZARDS

#2 Fuel Oil - Tank 400
#2 Fuel Oil - Tank 420 (Farm Tank)
Unleaded Gasoline Tank 440 (Farm Tank)

ODORFILTER SYSTEM OPERATION

Once installed, the MV LLC OdorFilter system operation is very simple. A system of sprinklers, to maintain moisture in the Iron Sponge Bed and to recycle biological agents/nutrients/chemicals, are attached to the sides of the concrete vessels and/or to the roof. Per direction from SemMaterial engineer, the recycle sump that was used at previous SemMaterials facilities has been replaced with an ABOVE GROUND chemically resistant, hazardous-waste rated, polyethylene drum. The main vessel drain line shall be equipped with a small electric pump to pump the drain water from the vessel over to the sump. The polyethylene sump is equipped with water recycling pumping, float switches, and plumbing to recycle the nutrients, biological agents, and flushed-out iron oxide back into the main reaction vessel.

The system operates by turning on the fan, adjusting the inlet water flow (typically 1-2 gpm) to the cyclone, and adjusting the timer and/or float switches to achieve water recycling from the sump back into the reaction vessels containing the iron oxide and the biological agents. (The recycle drum is equipped with a float switch to automatically pump the drain water/fluids back into the vessel.) Oil/water mixtures removed by the cyclone are drained to an oil/water separator (supplied by purchaser) with the excess water contained in the oil/water separator recycled back into the recycle drum via a small injection pump (**supplied by purchaser**).

ODORFILTER SYSTEM DESCRIPTION

Iron Sponge media has been used for many years in the oil and gas industry for the sweetening of sour gas from gas well operations. MV LLC has utilized similar technology for many years for the scrubbing of digester gases. During the course of this work, our development efforts have shown that the media can be successfully applied as an OdorFilter (patent pending), capable of: 1) high

H_2S/mercaptan removal capacity and 2) the partial to complete removal of other organic compounds, VOC's, and sulfur-bearing compounds in gaseous streams. The unique patent pending feature is the addition of biological agents and nutrients to augment the physical chemical reaction of the iron sponge with biological degradation of certain VOC's and other sulfur-bearing compounds and also to facilitate the regeneration of the iron oxide and thus extend operating life of the unit. A second patent pending feature is the recycle of fluids from the vessel thus conserving the chemicals and biological agents. The past successful treatment systems installed at numerous facilities has resulted in our current commercial design and application. Our experience has taught us correct design and operating parameters to achieve these treatment goals and resulted in a proprietary, patent pending, system.

For the purposes of this project, the design proposed is a replicate of the system that MV LLC has installed and is operating at the SemMaterials Saginaw, TX asphalt facility, wherein a large flow of plant off-gas is collected and passed upflow through a trickling filter rock bed having a unique pressure drop arrangement to protect the overlying iron sponge, and then into the moist Iron Sponge media containing biological agents. Incorporated within each concrete vessel is the internal piping required to provide recycling of water and biological agents/nutrients to optimize the treatment of the gases. Each stand-alone unit also consists of an oil removal cyclone coupled to a belt driven, explosion-proof, New York Blower fan. Since the purchaser desires an above ground sump/fluid recycling system the typical in-ground concrete vessel will be replaced by one (1) hazardous-waste-rated 95 gallon polyethylene drum equipped with lid, recycle pump and float switches. This recycle sump is utilized for the collection of recovered water from the oil/water separator plus the drain water from the vessel and equipped with internal recycling pump for recycling to the iron sponge vessel—thus conserving biological agents/nutrients/chemicals and minimizing fluids down the drain. Also included are the piping, valving, control panel, sump water inlet valving, sump pumps, and vessel cover. This system, as designed, is capable of treating 1000 cfm of tank vent gases containing up to 400 ppm H2S and associated hydrocarbon and volatile odors.

Specifically the 1000 cfm system proposed for the Grand Junction facility consists of one self-supporting, precast, concrete rectangular vessel **base** (3'6" tall and 7' X 16') plus **two risers** each being 3' tall. No pad or concrete sitework is required prior to installation, however siting of the vessel on sand or gravel is recommended. The vessel has an aluminum removable lid.

Stainless steel piping penetrates the vessel wall for inlet gas distribution. The dispersion piping network is buried in smooth river rock and a second, finer-grained, layer of river rock is present to create a pressure drop and a trickling filter-type arrangement to capture-and allow biodegradation

of-oil that bypasses the cyclone. Iron Sponge is spread on top of the upper rock layer—and is seeded with biological nutrients.

The system will also have an oil knockout system (cyclone) and an explosion-proof fan. The cyclone/fan system is designed to be mounted on a concrete pad (supplied by purchaser). Oil/water collected by the cyclone will be piped into an oil/water separator (supplied by purchaser). Drain water from the oil/water separator may be recycled to the recycle sump or alternately to a suitable drain. ***NOTE: RECYCLING OF WATER CONTAINING SIGNIFICANT VOLUMES OF EMULSIFIED OILS AND/OR OIL PRODUCTS MAY SHORTEN THE OPERATING LIFE OF THE IRON SPONGE.***

Under this proposal MV LLC will supply to SemMaterials:

- A firm price bid for the MV LLC/VARANI OdorFilter 1000 cfm system complete and delivered to the jobsite

ITEMS TO BE PROVIDED BY OTHERS

These are as follows:

Rock internal to the vessels.

The 1000 cfm system shall require 120 cf of nominal 2 inch rock plus 60 cf of nominal 1 inch rock to be emplaced in the vessel bottom. The 2 inch rock shall underlie the 1" rock to create a pressure drop effect.

Concrete Pad and labor for all connections from cyclone, gooseneck, fan, and fan-vessel piping. Dimension of vessel pad shall be not less than 9' X 18'; and for the fan/cyclone/gooseneck unit the concrete pad shall be not less than 6' X 14". ***Please note the vessel concrete pad is anticipated to be perpendicular to the fan/cyclone/gooseneck/sump concrete pad.***

12 X 12
6" RETAINING WALL

Piping labor for drain water, recycle water, sump system piping and valving

Electrical connections and lines are to be supplied by SemMaterials. Both 120V 60amp and 230V/3Φ are required. Motor starters are included and contained within the control panel.