

Preserve the Dunes, Inc. 12/18/97

Application to mine the Taube Road Extension in Hagar Township was made under the 1994 Sand Dune Mining Statute. Section 63702 of the statute allows mining in a Critical Dune Area only if (a)the operator had been mining the site prior to July 1989 or (b)the operator had been mining or permitted to mine an adjacent property in a Critical Dune Area and prior to July 1989 owned the property for which the amended permit is being sought. **The law prohibits new mining operations in Critical Dune Areas.** The Taube Road Extension includes land in a Critical Dune Area. The Nadeau Site is not in a Critical Dune Area. Therefore the Extension is a new mining operation in a Critical Dune Area. Section 63702 does not allow an operator to come from an area outside the Critical Dune Area and by amendment begin mining in a Critical Dune Area.

Therefore, the permit was issued in error and should be revoked.

DEQ (Fitch,Whitener, Daniels) 2/10/98

Section 63702 of Part 637, Sand Dune Mining, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) does state “the department shall not issue a sand dune mining permit within a critical dune area”; however, the statute continues with the language, “except under either of the following circumstances.”

Please remember one of the basic principles the Department of Environmental Quality (DEQ) utilizes in the enforcement of Part 637 of the NREPA. When a permit is issued to a sand dune mining operator the permit covers all of the contiguous acreage owned or leased by the operator. This position of issuing only one permit on contiguous property extends to when an operator acquires or leases additional property after the original permit is issued. The issuance of the permit on all contiguous property is done to be consistent with the intent of the original 1978 legislation of “limiting disturbance” within designated sand dune areas. By issuing only one permit for all contiguous acreage the mining company is limited to three active cell units at any one time, TechniSand (formerly Manley Brothers of Indiana) purchased the property that constitutes the Taube Road Extension from two private individuals in 1981. Then in 1985 TechniSand purchased the existing permitted site, the Nadeau Site, from the Unimin Corporation. When this second acquisition occurred TechniSand had one option, to seek an amendment to the existing permit for the Nadeau Site. Both of the transactions occurred prior to July 5, 1989 when the Critical Dune amendments became effective and; therefore, provided TechniSand the exemption under Section 63702(1)(b).

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Our position and interpretation of the law remains unchanged. We have consulted with one of the drafters of this section and it is his recollection that the intent was to not allow an operator to extend from a non-critical dune area into an adjacent critical dune area. The DEQ has chosen to interpret the statute differently. The courts may have to decide whether one can begin strip mining a virgin critical dune because one has been permitted to mine adjacent land that is not in a critical dune.

Regarding the specifics of the GSD response, we have a copy of the Warranty Deed dated July 31, 1991 by which TechniSand, Inc. bought the Nadeau Site from Manley Bros. of Indiana, Inc. *TechniSand acquired the land two years after the July 5, 1989 effective date for the critical dune legislation.*

Condition (b) of 324.63702 allows expansion in a critical dune area when “the operator holds a permit issued pursuant to section 63704 and is seeking to amend the mining permit to include land that is adjacent to the property the operator is permitted to mine, and prior to July 5, 1989 the operator owned the land or owned the rights to mine dune sand in the land for which the operator seeks an amended permit.”

This is a limited right to expand sand mining — limited to land owned by the operator prior to July 5, 1989. TechniSand, the operator, did not own the land prior to the effective date of the statute and hence cannot amend its permit to include a critical dune.

For both or either of these reasons ***the permit was issued in error and should be revoked.***

Russell Harding Letter 8/6/98

1. “Section 63702 does not allow an operator to come from an area outside the Critical Dune Area and by amendment begin mining in a Critical Dune Area (i.e., the Taube Road Extension).”

Response: On July 13, 1998, the Department of Environmental Quality (DEQ) was served a Summons and Complaint titled Preserve the Dunes, Inc. versus Russell J. Harding, Director, Department of Environmental Quality, and TechniSand, Inc. filed in the 2nd Judicial Court of Berrien County, Docket File No. 98-3789CEP, before the Honorable David M. Peterson. The Attorney General has advised the DEQ that, because the Nadeau Site is in litigation, it is inappropriate to make further comments to your statements relative to this item.

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We await the MDEQ reply to the Preserve the Dunes complaint.

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In summary, the engineering report notes the following violations of the conditions of the permit for sand dune mining issued by the Geological Survey Division of the M/DEQ.

1. More than 3 cells are active

The enclosed aerial photograph overlaid with the cell boundaries indicates that 10 of 11 cells can be considered active. Only cell 1 has been reclaimed.

DEQ (Fitch,Whitener, Daniels) 2/10/98

1. "More than 3 cells active."

We have examined the aerial photograph and overlay that you provided with your letter and find the following problems with your determination that 10 of the 11 cell units at this site are active. Your aerial photo is taken at an oblique angle which elongates the scale from north to south. The cell unit configuration you used is not correct. On January 14, 1998, TechniSand had the site flown by an aerial photography firm with proper flight controls and then prepared an overlay which depicts the current topography, vegetation, roads, buildings, etc. We have utilized this aerial photo and conducted an on-site inspection and verified the current site conditions as:

- Active Cell Units - Cell Units 6, 7, and 9
- Interim Cell Units - Cell Unit 3
- Released Cell Units - Cell Units 1, 2, 4, and 5
- Not Active - Cell Units 8, 10, 11, and 12 (west side of Blue Star Hwy.)

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1. More than 3 cells are active

The memo states that "The cell unit configuration you used is not correct." The boundaries were taken from information provided to us by the DEQ in response to a FOIA request. TechniSand's drawing incorporated in their PCUMRP latest revision November 1993. After two more requests we were provided with amendments 5 and 6 to the permit which modified the Cell Unit boundaries.

We also requested under the FOIA a copy of the map and overlay prepared by TechniSand. While our photograph did not have ground controls it is generally correct. We have reviewed the map and overlay. For the most part, it confirms our original findings as described below.

We understand that the PCUMRP was amended to create a "Plant Area" for use in washing and storing sand. Otherwise, a cell is in one of four states.

- a. Inactive: Untouched
- b. Interim Status: A cell has been mined and all mining activity has been completed. It has been graded to slope not exceeding 1:3. It has been revegetated per the PCUMRP and is in the first year of growth. Vegetation must have taken root to cover 80% of the areas disturbed by sand mining and no single area exposed to the elements is greater than 25 square feet. All mining equipment has been removed except a roadway, conveyor or slurry pipeline may be maintained and considered part of the plant site.
- c. Fully reclaimed or "released" (from conformance bond): The plant material has sustained itself for one year. There are no areas where the survival rate is less than 80% in any 10' x 10'.
- d. Active: Any cell not in one of the classifications above (other than as part of the plant site), but generally, a cell unit being mined or used for mining activity.

Russell Harding Letter 8/6/98

1. "More than 3 cells are active."

Response: In order to address this concern by Preserve the Dunes, Inc., the DEQ requested TechniSand to hire a registered land surveyor to accurately lay out and mark the corners of each cell unit on the property. This survey has been completed and the corners of the cell units have been identified with white four-inch polyvinyl chloride pipes that extend out of the ground six to eight feet high, which makes them readily visible for inspection purposes. Staff of the DEQ has reviewed the work performed by the registered surveyor and believes the corners of each cell unit are accurately marked. The surveyor has also identified sufficient site references relative to each cell unit corner to be able to reestablish the white post in the event they are disturbed or removed.

There are two terms utilized in the statute and noted in Preserve the Dunes, Inc. statement which need to be addressed, they are "inactive" and "active" cell unit status. Inactive does not mean "untouched." There are many activities that could and do occur in inactive cell units. These types of activities include silviculture practices (high grading of marketable trees), haul road activity (for the movement of vehicles and equipment), topsoil stockpiles, and the removal of source material for revegetation, etc. "Inactive" under the implementation of the sand dune mining statute means no direct mining within the cell unit. "Active" are those cell units where actual mining activity is occurring. The DEQ considers the removal of tree stumps and topsoil as the commencement of the active status of a cell unit. We also allow haul roads, conveyors, and pipelines from a dredging operation to remain when a cell unit is placed in interim or even released status. The haul road is considered part of the plant site and will be reclaimed at the end of the mining operation or when the haul road is no longer necessary for the active mining operations.

Following is an status update for each cell unit:

- a. Cell Unit 1: There was some mining equipment inadvertently stored approximately 20 feet over the line between Cell Unit 1 and the plant site. The equipment has been relocated entirely

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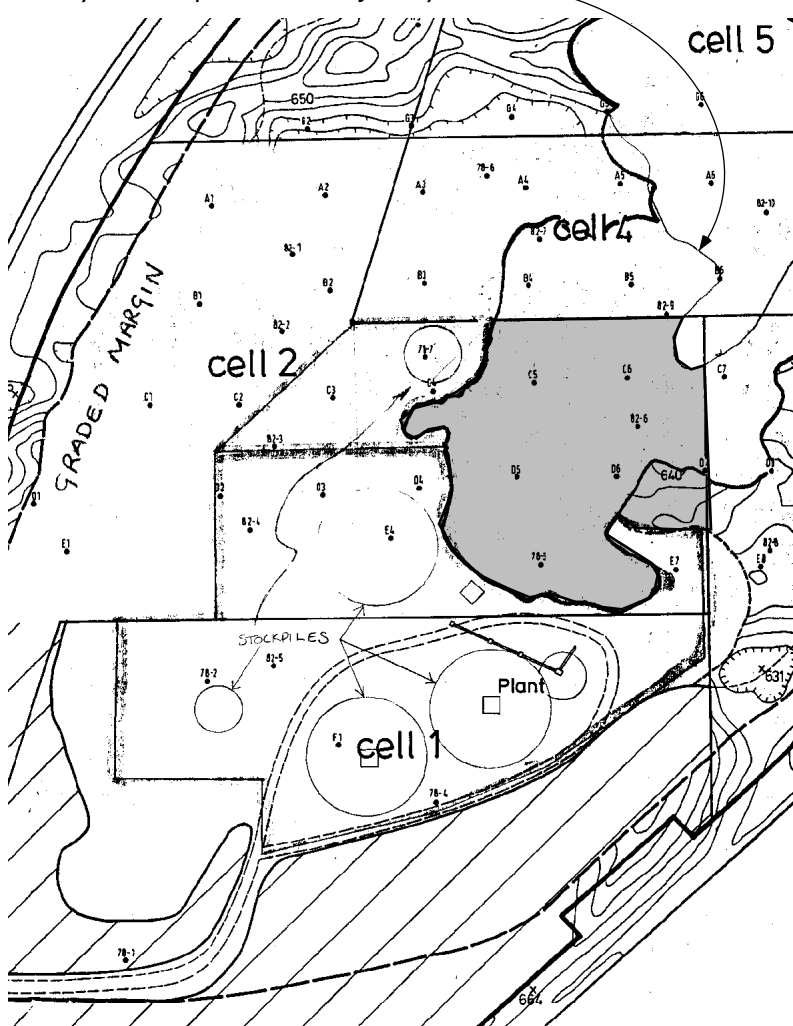
1. Placing markers on the site is of no value unless these locations are tied back to a site plan drawn to scale and to survey coordinates provided by the registered land surveyor who conducted the survey and set the on site markers. This additional information will allow calculation of cell unit areas, correlation to aerial photographs and previous documents, and allow accurate replacement of the markers. Without it, the markers on the site are just another version of or modification to the PCUMRP site plan. The necessity of this data is obvious because the site plans produced in January 1998 by TechniSand from aerial photography indicate cell unit boundaries 50 to 75 feet from those now marked in the field. We understand that TechniSand has been requested to provide this information and that we will receive a copy. Once this is received and analyzed we may revise some of the observations below.

We understand that silviculture is permitted in a cell without putting it in active status. However, creating a haul road or a route for moving equipment is not allowed by the regulations, the statute or the Permit.

Paragraph **63701(a) of the Sand Dune Mining statute** defines "Active cell-unit" as one "in which vegetation and topsoil have been removed in preparation for sand dune mining or sand removal has been initiated after the date of issuance of the sand dune mining permit. *Vegetation removal does not preclude the removal of marketable forest products from a cell-unit, if the removal maintains the ground cover and topsoil within the cell-unit in stable condition.*" This definition is much more restrictive than the criteria being used by the MDEQ, i.e., "actual mining activity."

As cited previously, **Special Condition 4 of the sand dune mining permit** states "The permittee shall *confine all vehicles and equipment fundamental to the sand dune mining operation to the limits of the*

Edge of dredge lake shown by TechniSand in overlay of aerial photo taken in January 1998.



Grey area shows portion of Cell Unit 2 (about 6.20 acres) originally under water or "reclaimed" that was exposed bare sand in January 1998. The base for this illustration is the plan attached to the September 8, 1992 PCUMRP amendment request that TechniSand submitted to move 2 acres from Cell Unit 2 to the Plant Site.

Through aerial photographs and an onsite inspection we have made the following observations.

- a. **Cell 1** has mining extraction and processing equipment stored in the southwest corner. (See photograph on page 11.) The eastern portion of the cell had been underwater. That portion is no longer under water and is raw sand. **Therefore, it must be considered active.**
- b. **Cell 2** was revegetated with grass along the west slope. A road runs through the cell. By amendment part of the cell was added to Plant Area. The eastern portion of the cell had been underwater. That portion is no longer under water and is raw sand. **Therefore, it must be considered active.**
Though years have passed since the grass was planted, still no trees and shrubs have yet been planted.
- c. **Cell 3** was graded, revegetated and placed in interim status according to the DEQ. However, the northern portion was being mined in November 1997. See photo on next page. The vegetation has taken root on much less than 80% of the land disturbed by mining and there are large areas of bare sand. Furthermore, the slopes at the edge of the water are greater than 1:3. **Therefore, it must be considered active.**
- d. Disturbed areas in **Cell 4** were left under-water or added by amendment to the plant area. The eastern portion is no longer underwater, but is exposed sand. **Therefore, it must be considered active.**
- e. **Cell 5** may be similar to 4 or it was released in error since at least an acre is raw sand. In addition the slopes at the edge of the water are greater than 1:3. **Therefore, it must be considered active.**
- f. **Cell 6 is active per DEQ.**
- g. **Cell 7 is active per DEQ.**
- h. **Cell 8** has bare exposed sand in the north eastern portion. **Therefore, it must be considered active.** Further-

within the area designated as plant site.

- b. **Cell Unit 2:** The northern reject sand stockpile within the plant site area has transgressed into the cell unit approximately 10 feet along the east side of the haul road. This area will be pushed back and diked and any disturbed area will be planted with marram grass during the fall 1998 planting season. The cell unit has been planted with grasses and woody species. The woody species have been planted as cuttings, seedlings, and seeds. The fast growing hybrid poplars are currently 10 to 20 feet high on the upper slopes of this cell unit, while the pines and oaks are still only one to two feet in height. The Progressive Cell Unit Mining and Reclamation Plan (PCUMRP) does not state a planting density for the woody species but it has never been the intent to restore all areas to a dense forest environment.
- c. **Cell Unit 3:** This cell unit is in interim status. At the time it was placed in interim status all of the conditions for interim status were met; however, because of the difficult growing conditions which exist within sand dunes, not all of the grasses that were originally planted have survived and supplemental planting on the lower slopes is required. This is not an uncommon situation and the cell unit will remain in interim status until all conditions for full release are met.
- d. **Cell Unit 4:** There is a small portion in the western part of this cell unit, approximately one acre in size that has been invaded by the northern reject sand stockpile from the plant site area. This area was previously in open water and will be re-excavated as a shallow wetland area and the stockpile will be diked to prevent future incursions.
- e. **Cell Unit 5:** This cell unit has been released; however, there is a small portion, approximately one-half acre in size, along the northern edge of the adjoining Cell Unit 8 that has not been final graded and planted. When interior cell units have contiguous boundaries, we do not require the final grading and planting to be done along the connecting areas because the grading and planting will be disrupted when the adjacent cell unit becomes active. There is also a small portion of this cell unit which has exposed sand. This

active cell units. Vegetation indigenous to the undisturbed portions of the permit area shall not be removed, damaged or destroyed in any manner. With this Special Condition the MDEQ actually prohibits "haul road activity, topsoil stock piles, and the removal of source material for revegetation" from inactive cells. Yet, the latest response states these activities are allowed!

- a. **Cell Unit 1:** *After the survey* the equipment was only 20 feet outside the Plant Area. At some time between our reporting this violation last December and early April, the equipment was moved from a position several hundred feet inside Cell Unit 1 to the spot where the MDEQ identified the small violation. See photographs on page 10.
- b. **Cell Unit 2:** We are pleased that the MDEQ has identified a 10 ft. incursion into Cell 2. However, **the violation of the 6.2 acre area of exposed bare sand east of the Plant Area was overlooked.** See the plan to the left. Along the western edge, we found two taller poplars, a host of cherry trees that had invaded the edge from the buffer zone and two intermittent rows of small pines. The PCUMRP originally called for replanting trees at



very close spacing across the cell unit, not just along the edge of the cell. Cell Unit 1 was reclaimed accordingly, but no cell has been since. See the photograph above — the edge of the grassed area is defined by the trees

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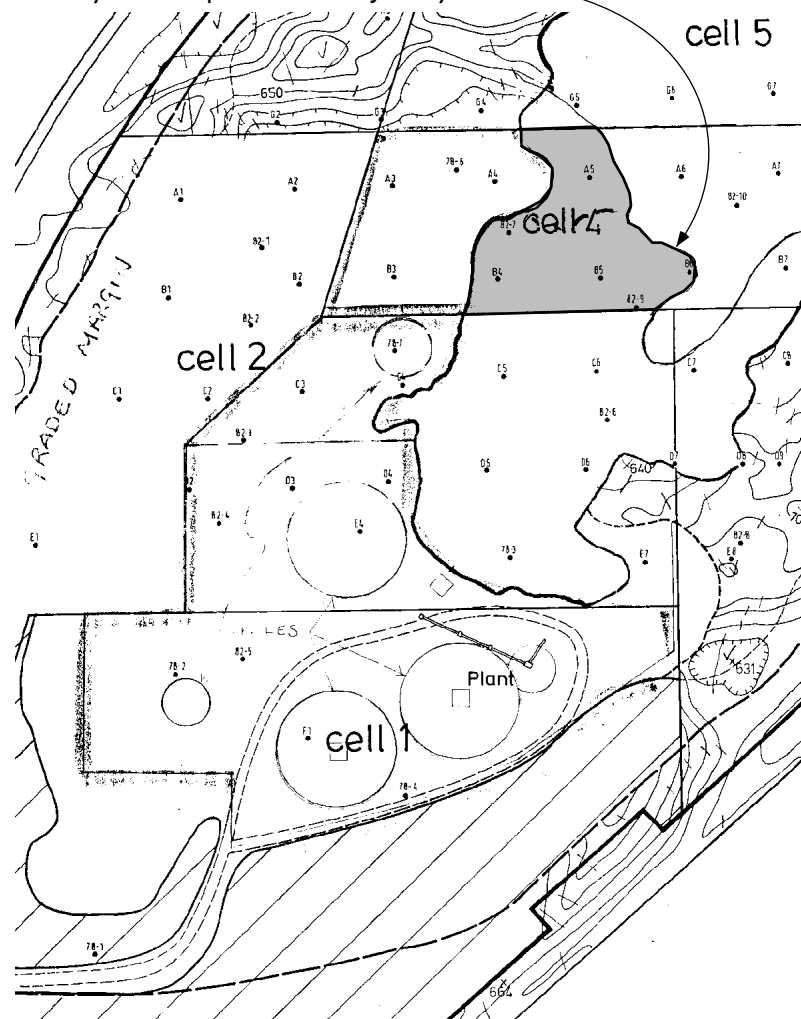
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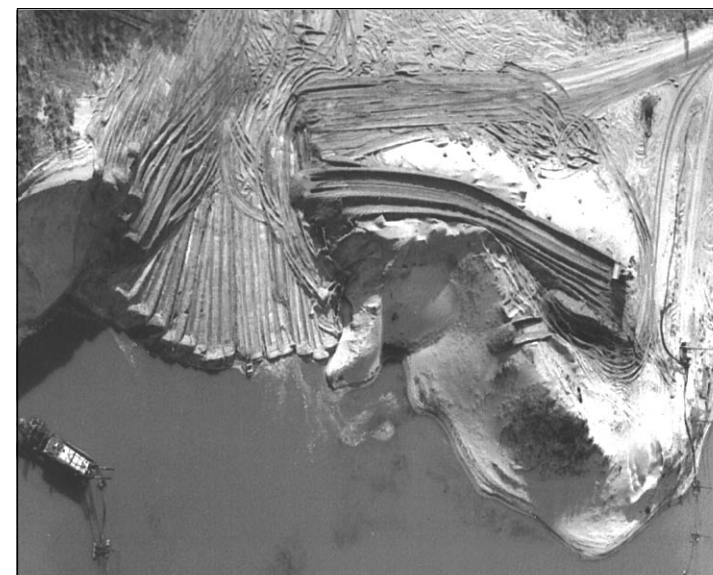
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Edge of dredge lake shown by TechniSand in overlay of aerial photo taken in January 1998.



Grey area shows portion of Cell Unit 4 (about 2.51 acres) originally under water that was exposed bare sand in January 1998. The base for this illustration is the plan attached to the December 3, 1992 PCUMRP amendment request that TechniSand submitted to move 3 acres from Cell Unit 4 to the Plant Site.



Cell Unit 6 being dredged and bulldozer pushing sand from Cell Unit 3 into Cell Unit 6 in November 1997.

more, it has a haul road through it which is prohibited by Special Condition 4 of the permit.

- i. **Cell 9 is active per DEQ.**
- j. **Cell 10 is not active.** However, an onsite visit indicates that a road has been used to move tracked vehicles to and from the active mining areas in Cell 9 from Cell 11 in violation of Special Condition 4.
- k. **Cell 11 is active.** Top soil has been stripped from areas. An onsite visit indicates that a road has been used to move tracked vehicles to and from the active mining areas in Cell 9. If not active, this is a **violation of Special Condition 4.** See page 11, item 2.

area was previously in open water when the cell unit was released. The area will be re-excavated as a shallow wetland area when similar work is done in Cell Unit 4.

- f. and g. Cell Units 6 and 7: Currently active mining.
- h. Cell Unit 8: This cell unit is not active. There is a topsoil stockpile along the south edge of the cell unit boundary. This material was placed along the old east-west roadway that is the boundary between Cell Units 5 and 8. The temporary placement of topsoil stockpiles is not a violation of the inactive status of a cell unit because the storage of topsoil does not constitute the commencement of mining.

- i. Cell Unit 9: Currently active mining.
- j. Cell Unit 10: This cell unit has had no mining. The company has used an existing haul road to move equipment from one active cell unit to another and this is a permissible activity.
- k. Cell Unit 11: This cell unit has had no mining. There has been no stripping of topsoil from within this cell unit; indeed, the reverse has occurred. There has been topsoil stockpiled in the southwestern edge of the cell unit. The topsoil will be utilized to reclaim Cell Unit 6 when mining is complete.
- l. Cell Unit 12: This cell unit is located on the west side of Blue Star Highway and there has been no activity within this cell unit.

planted according to the first revision (1987) of the PCUMRP. TechniSand has volunteered to plant trees at approximately 30 foot spacing elsewhere.

- c. **Cell Unit 3:** The response ignores the fact that **Cell Unit 3 was being mined in November** as shown in the photograph on this page. There are large bare patches that have never been replanted and slopes that have not been regraded.
- d. **Cell Unit 4:** We are pleased that the MDEQ will now require TechniSand to comply with the permit conditions in this instance. However, **the area of the violation is 2 1/2 acres, not one acre.** See plan to left.
- e. **Cell Unit 5:** We are pleased that the MDEQ will now require TechniSand to comply with the permit conditions in this instance. **However, the total area of the violation is 1 1/2 acres — 1/2 acre next to Cell Unit 8 and 1 acre abutting Cell Unit 4/Plant Area.** The excuse that it is next to another cell and cannot be reclaimed until mining of the adjacent cell is complete is invalid. This situation can be avoided with planning and an orderly process of mining. In this case, most of the bare sand is adjacent to Cell Unit 4 & Plant Area.
- f. **Cell Unit 6** is in active status.
- g. **Cell Unit 7** is in active status.
- h. **Cell Unit 8:** A triangular area between cell units 5 and 7 with an approximate area of 2 acres has been stripped of vegetation. A haul road runs through the cell unit. According to the markers on the site, a 75-80 foot wide strip about 1 acre in area has been mined previously, when Cell Unit 2 was being mined, without placing the cell in active status. **This cell unit is in violation of Paragraph 63701(a) and Special Condition 4 which prohibit stripping the vegetation in an inactive cell and prohibit moving equipment through inactive cells.**
- i. **Cell Unit 9** is in active status.
- j. **Cell Unit 10:** See discussion above.

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2. **There are no interim cells.** Reclamation was started on cell 2. However, part of the cell that was underwater is now exposed raw sand with no reclamation efforts. The enclosed table indicates the acreage of each cell and the portion of each stripped of vegetation and portions reclaimed. These areas were measured

2. "There are no interim cells."
There is one cell unit at this site in interim Status. Cell Unit 3 was placed in Interim Status on May 27, 1997. The cell unit was mined, regraded, and planted as of the site inspection conducted on March 4, 1997. The cell unit will remain fully bonded until such time it is released.

2. **There are no interim cells.** Cell Unit 3 was being mined early November when our first aerial photophaphs were made. See the closeup of that activity on previous page. We have also confirmed that grading and revegetation of the cell have not been completed. It is still in active status since it does not meet the criteria for interim status.

2. "There are no interim cells."
Response: There is one cell unit at this site in interim status. Cell Unit 3 was placed in interim status on May 27, 1997. The cell unit was mined, regraded, and planted as of the site inspection conducted on March 4, 1997. The cell unit will remain fully bonded until such time as it is released.

2. **There are no interim cells.** If Cell Unit 3 is in interim status, then **the mining activity last Autumn was a violation of its interim status.** We will monitor it during its interim status to be certain that it meets requirements for being "released."

3. **The one reclaimed cell is being used for unpermitted activities.** Rather than park vehicles in the Plant Area, they are being parked in reclaimed portions of cell 1.

3. "The one reclaimed cell is being used for unpermitted activities."
We conducted a site inspection and could not find any area within Cell Unit 1 that is being utilized for parking cars. Since the aerial photo you have utilized does not depict an accurate boundary for the cell units it is possible the vehicles you believe are being parked within Cell Unit 1 are actually within the designated plant area.

3. We agree that there are no vehicles parked in the reclaimed area of Cell Unit 1. Per our eMail of January 30 we stated that what we had originally thought were vehicles is actually abandoned equipment. The discussion under "Additional Comments" on page 11 documents this and consequently our conclusion is accurate: **The one reclaimed cell is being used for unpermitted activities.**

3. "The one reclaimed cell is being used for unpermitted activities."
Response: Upon completion of the survey, it was determined some mining equipment was inadvertently stored approximately 20 feet over the boundary line between Cell Unit 1 and the plant site. The equipment has been relocated entirely within the area designated as plant should not be planted at the same time. The ideal method to ensure the survival of the woody species is to first stabilize the disturbed area with grasses and then come back and plant the trees and shrubs later. This is exactly what the operator is doing at this site.

3. The one reclaimed cell is being used for unpermitted activities: As stated above in 1(a) we concur that this is no longer true. The violation has been corrected since we first identified the violation last December. See photographs on page 10. We are pleased that the MDEQ has required TechniSand to comply with the permit conditions in this instance.

This cell unit is in violation of Special Condition 4 which prohibits moving equipment through inactive cells.
k. **Cell Unit 11:** See discussion above. **This cell unit is in violation of Paragraph 63701(a) and Special Condition 4 which prohibit striping the vegetation in an inactive cell and prohibit moving equipment through inactive cells.** The corner markers are not evident in the field. **It appears that this cell is now being mined where it adjoins Cell Unit 6.** If so, this is another violation..
1. **Cell Unit 12** was not indicated to be mined in the original or any subsequent PCUMRP. If it were to be added to the plan (and that would be conditional on the Covert Township Ordinances) we fully expect that this will necessitate Public Hearings per Special Condition 9, and that the mining would have to comply with the 1994 amendments.

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4. **Top soil is not being stockpiled and spread over reclaimed areas** as stated in the Progressive Cell Unit Mining and Reclamation Plan.

5. **Reclamation is not being completed in conformance with the amended Progressive Cell Unit Mining and Reclamation Plan of 1989.**

Grasses were used to revegetate portions of cell 2 instead of oaks, beeches and other indigenous trees as proposed in the original cell unit mining and reclamation plan, and instead of pine and poplar trees as proposed in the 1989 amendment.

6. **The site has not been secured with a fence.** Only small portions of the site perimeter are fenced.

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4. "Topsoil is not being stockpiled and spread over reclaimed areas.

We disagree with your statement. There is currently topsoil stockpiled in the east end of Cell Unit 6 and the south-west portion of Cell Unit 7. These topsoil stockpile areas are evident on both the aerial photo which you have utilized and the aerial photo flown on January 14, 1998. There have been many topsoil stockpiles created and then utilized for reclamation over the life of this mining operation, which is exactly what the Progressive Cell Unit Mining and Reclamation Plan (PCUMRP) requires.

5. "Reclamation is not being completed in conformance with the amended Progressive Cell Unit Mining and Reclamation Plan of 1989."

The PCUMRP does not prohibit the use of other types of plant material in the stabilization and revegetation of disturbed areas. Grasses are essential to the success of woody vegetation and should not be planted at the same time. The ideal method to ensure the survival of the woody species is to first stabilize the disturbed area with grasses and then come back and plant the trees and shrubs later. This is exactly what the operator is doing at the site.

6. "The site has not been secured with a fence,"

Special permit condition No. 1 does state, "The permittee shall install and maintain fencing... in a manner restricting pedestrian access ..." this special permit condition does not mean the entire mining operation should be fenced. We require the operator to install sufficient fencing and signs to achieve the intent of the permit condition, which is to restrict pedestrian access. The permit condition addresses two concerns: one to provide for public safety and two to prevent disturbance of reclaimed areas. The operator at this site has installed sufficient fencing and signs to deter pedestrian access to the site.

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4. The "top soil" in the east end of Cell Unit 6 is simply a pile of fine brown sand. A search of the south-west portion of Cell Unit 7, revealed no stockpiled top soil.

5. Our observation stands that **reclamation is not being completed in conformance with the amended Progressive Cell Unit Mining and Reclamation Plan of 1989.** Cell Unit 2 has been classified "released" for a number of years. Yet, the slope has had only a few trees planted at the very top of the slope. It is still just a grassy slope. By releasing it, the DEQ has said that it is fully reclaimed. It is not.

6. **Fencing and signage is inadequate to restrict pedestrian and off road vehicle access.** The property line at the Blue Star Highway has under 1,000 feet of fencing. This leaves about 4,400 feet open. Signage is sporadic. At the south side of the north gate, there is a space wide enough to drive a car through. There is no sign at or near the gate. This clearly not adequate.

Furthermore Special Permit Condition N^o 3 requires that the operator prevent access by off road vehicles (ORV's). There is evidence of regular, repeated access being

Russell Harding Letter 8/6/98

4. "Top soil is not being stockpiled and spread over reclaimed areas.

Response: Our inspections indicate that topsoil is being property stockpiled and spread for site reclamation. The soils on this site are predominately those of the Oakville Series. Soil Zone "A" is characterized by 0-4 inches of dark grayish brown fine sand. Soil Zone "EB" is 4-9 inches of yellowish brown fine sand. Soil Zone "Bw1" is 9-20 inches of yellowish brown fine sand. The topsoil being stockpiled and spread at the site corresponds with the original native soils at the site. Although this material may not resemble the organic-rich topsoil which develops in areas of heavier soil textures, it is typical of the topsoil encountered within sand dunes. Topsoil is currently stockpiled in the east end of Cell Unit 6 and the southwest portion of Cell Unit 7.

5. "Reclamation is not being completed in conformance with the amended Progressive Cell Unit Mining and Reclamation Plan of 1989.

Response: The PCUMRP does not prohibit the use of other types of vegetation. Grasses are essential to the success of woody species in disturbed areas and must be planted and established before the woody species are introduced into the area. The density and distribution of woody species plantings are not delineated in the PCUMRP. The woody species have been planted at a satisfactory density; there has never been an expectation that the woody species would achieve a complete reforestation of the site.

6. "Fencing and signage is inadequate to restrict pedestrian and off road vehicle access.

Response: TechniSand has installed additional fencing along the property lines to further restrict illegal trespass by off road vehicles (ORV's). Approximately 100 feet of additional fencing was installed adjacent to the right-of-way line of Blue Star Highway and adjacent to the = gate at the north access point, also along Blue Star Highway. The company has also hired a private security company to patrol the site during non-working hours and has already apprehended three ORV trespassers who were issued tickets by the Covert Township police.

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4. **Top soil is not being stockpiled and spread over reclaimed areas.** Samples taken from the undisturbed areas indicate 4 to over 12 inches of rich organic material over the sand. What we see being spread is primarily sand with very little, if any, organic material. Top soil will assist to some degree in retaining moisture, but more importantly, it contains seeds of indigenous plants that can lead to more rapid and natural revegetation. With what is being described as "topsoil" this is highly unlikely.

5. **Reclamation is not being completed in conformance with the amended PCUMRP.**

The information provided by the MDEQ under the FOIA indicates that a density of trees was specified by reference to a USDA Guide for stabilizing dune areas (spaced 6 x 8 feet in stabilized areas.) These recommendations were followed only in Cell Unit 1.

6. Fencing and signage is inadequate to restrict pedestrian and off road vehicle access: This violation has been largely corrected. We are pleased that the MDEQ has now required TechniSand to comply with the permit conditions in this instance.

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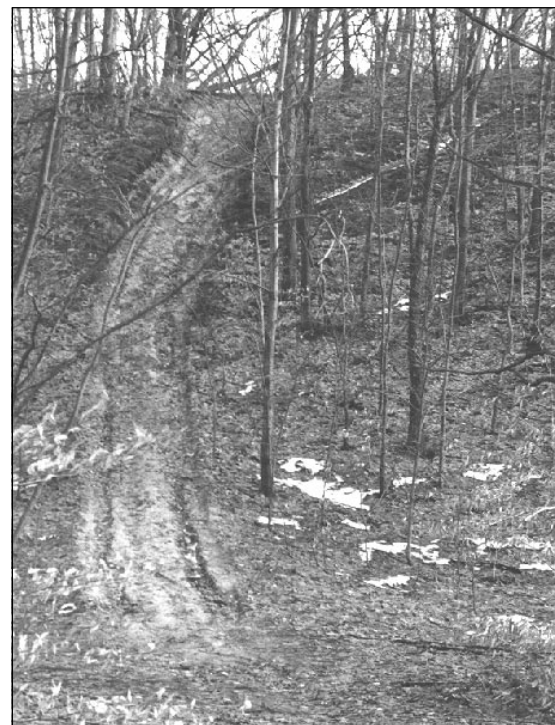
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Preserve the Dunes Response 8/20/98

made by ORV's. (See the photograph below of a road where the dune has been eaten away by trucks and ORV's trying to scale the side of a steep dune in Cell 10. Also see the photograph of the ORV on top of one of the stripped dunes in Cell 9.) About 100 feet of fence was added the week of April 6.



Off road vehicle on top of dune in Cell Unit 9.



Rutted off road vehicle and truck lane in Cell Unit 10.

7. The response to my Freedom of Information Act request indicates that **no up to date 15 year mining plan fulfilling the requirements of Section 63707 is on file.**

7. "No up to date 15 year mining plan."

The 15 year mining plan required by Section 63709 of Part 837 of the NREPA is language from the original statute, enacted by the legislature in 1976. The 15 year mining plan requirement is directed at a mining company and is intended to depict the company's plans for mining on all of their properties. If a company only operates one mining site then the 15 year mining plan does only address one mining site. However, the reason for requiring the 15 year, mining plan was so the DEQ will know what sites are being mined and what sites may be mined in the future, i.e. where applications for new permits may be requested. The law does not require any updating of a company's 15 year mining plan.

7. Section 63704 states "(2)Prior to receiving a permit from the department, a person or operator shall submit all of the following: (d) A 15-year mining plan as prescribed by Section 63707." This means that with each permit application, a 15-year mining plan must be submitted. It would seem obvious that a plan for the next 15 years is required — not one for some 15 years in the past.

Furthermore, not requiring an updated plan is unreasonable. A permit is originally issued only after public hearings. One of the issues addressed in an environmental impact statement is the amount of truck traffic, noise and activity that is expected. It was estimated in 1978 that

7. "... no up to date 15 year mining plan ... is on file"

Response: Section 63707 does not require an "up-to-date" 15 year mining plan. The statute requires the company to file a 15-year mining plan for all of their operations at the time they make application for a sand dune mining permit. The 15 year mining plan shows all of the company's current and future mining plans and is utilized by the DEQ to determine where a company will need to apply for permits when they expand their operations.

7. **There is no up to date 15 year mining plan fulfilling the requirements of Section 63707.** Our conclusion remains and our logic is reasonable. But even accepting the MDEQ's argument, the mine has had a number of operators. Certainly each operator should provide a 15 year mining plan prior to being issued a permit. We assume that the 8/6/98 MDEQ response to item 9 indicates that an up to date 15 year mining plan will be provided by TechniSand.

Preserve the Dunes, Inc. 12/18/97

DEQ (Fitch, Whitener, Daniels) 2/10/98

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400,000 tons of sand per year would be mined at the Nadeau Pit. If the operator is now removing 1,000,000 tons in a year this would be a very significant increase and worsens the environmental impact. It effects life safety. It effects the wear and tear on roads. It effects the quality of life by increasing the noise level. The GSD is derelict in its duty to the taxpayers and citizens of the state by failing to manage the level of activity at a sand dune mine. Therefore, we maintain there is **no up to date 15 year mining plan fulfilling the requirements of Section 63707.**

8. The response to my Freedom of Information Act request indicates there is **no current Part 301 Permit on file** with the Land and Water Management Division. According to information provided by that Division, the last permit was issued in 1990 and lapsed in 1993, 4 years ago.

8. "No current Part 301 Permit on file." Part 301, Inland Lakes and Streams of the NREPA is administered by the DEQ's, Land and Water Management Division (LWMD). You are correct the Inland Lakes and Streams permit did lapse in 1993. However, the permit has not been renewed in part because of a shortage of staff in the LWMD. The company has submitted a request for renewal of their Part 301 permit to the LWMD which is pending. Usually normal operations are allowed to continue during the permit renewal process, as long as the company operates in compliance with the previous permit Conditions.

8. **The company has been operating without a permit for four years.** The permit application was not filed until January 27, 1998. This is six weeks after we notified the DEQ and by copy, TechniSand. Shortage of staff in the LWMD has had nothing to do with any delay so far in securing a permit. This is not a usual situation. Allowing dredging operations to continue when a permit is not in effect makes a mockery of the law. It also indicates how little importance TechniSand places on compliance with the law. By allowing the permit to lapse, TechniSand has opened the permit up for a complete reassessment, which is very necessary to ensure that Rogers Creek and the ground water supply to adjoining properties are protected. **Dredging should be halted until a full and detailed review of the permit application has been completed.**

8. "... there is no current Part 301 Permit on file Dredging should be halted until a full and detailed review of the permit application has been completed.

Response: The mining company is required to have a permit for this site from the DEQ's, Land and Water Management Division (LWMD) under Part 301, Inland Lakes and Streams, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, because they are removing sand from below the water table and creating a lake. The Part 301 permit was originally issued in 1983 and was renewed several times, with the last renewal taking place in August 1990. Due to delays in the renewal process, the Part 301 permit expired in 1993. The LWMD is now processing the company's request to renew the Part 301 permit. There have been no violations of the permit conditions and the dredging activity has not expanded beyond the area originally permitted. The DEQ has assessed the dredging activities and found no indication of adverse impacts.

8. **There is no Part 301 Permit on file — this violates the statute.** The permit expired in 1993. We agree on the facts. However, the law requires a permit to dredge. Section 30107 of Part 301 specifically provides that "a permit is effective until revoked for cause *but not beyond its term* and may be subject to renewal." There is no legal justification for the MDEQ allowing operations to continue once the permit expired.

9. According to the Van Buren Conservation District **a duplicate copy of the 15 year mining plan is not on file per 63707(2).**

9. "A duplicate copy of the 15 year mining plan is not on file, with the VanBuren Conservation District, per 63707(2)." The 15 year mining plan for this site was prepared and submitted by the original Manley Brothers of Indiana in February 1978. A public hearing on the "Intent to Issue a Permit" was held on February 20, 1979 at the Berrien County Courthouse. It is the practice of the Department to make available all documents prepared by the

9. No further comment, except that it is the responsibility of the sand dune mine operator, not the DEQ, to file with the Conservation District.

9. "... a duplicate copy of the 15 year mining plan is not on file with the Van Buren Conservation District, per 63707(2).

Response: On July 2, 1998, the DEQ requested TechniSand to prepare an updated 15 year mining plan for all of their sites and submit their plan to the DEQ and the Berrien County and Van Buren County Soil Conservation Districts.

9. We are pleased that the MDEQ now agrees with us regarding the requirement of the law, paragraph 63707(2).

Preserve the Dunes, Inc. 12/18/97

DEQ (Fitch, Whitener, Daniels) 2/10/98

Preserve the Dunes Response 2/18/98*

Russell Harding Letter 8/6/98

Preserve the Dunes Response 8/20/98

applicants for a permit at several locations including the local area prior to the public hearing. The Notice of Public Hearing indicates we did make the documents available at the County Clerk's office for VanBuren County from February 8, 1979 to March 9, 1979. We would have provided the same information to all other interested agencies, including the Soil Conservation Districts, at that time. Our records do not verify, by specific correspondence, that we did send the documents to the VanBuren County Soil Conservation District; therefore you may be correct in this allegation.

Preserve the Dunes, Inc. 12/18/97

1. We have been informed that sand has been brought in from other mines for washing at the Nadeau Pit. This has never been mentioned in any permit applications to the Geological Survey Division or to the Land and Water Management Division. The operation increases the demands for ground water. This additional use of ground water was never analyzed in the environmental impact study. Nor were the impacts of additional truck traffic addressed. Furthermore, processing of sand from other sites is against the zoning ordinance of Covert Township. **This practice should be stopped or the permitting process should be reopened to consider the impacts of these operations.** Public hearings need to be held before these operations are included in the sand dune mining permit.

2. Should cells 10 and 11 not be considered active, because the mined area is minor and was mined in error or unintentionally, TechniSand is then in violation of Special Permit Conditions, Item 4, since both cells are being used to move equipment fundamental to the mining operation.

DEQ (Fitch,Whitener, Daniels) 2/10/98

1. "Sand has been brought in from other mines for washing at the Nadeau Pit."

Sand is not being brought into the Nadeau Pit from an off-site source and then processed utilizing the wash plant at this site. In order to process sand from an off-site source the company would need a means to off load the sand from trucks, place the sand on a conveyor system, and then introduce the sand into the wash operation through the slurry pipeline system. There are no facilities at this site to accommodate this type of activity.

However, a sand dune mining operation that provides sand for the foundry industry must create a final product which meets the specifications of the customer. There are very few sand mining operations that are able to produce a final product for their customer without blending sands from other sources. Therefore, bringing sand from other sources is both a common practice and an essential practice to the sand dune mining companies which produce foundry sand. A sand dune permit issued under Part 637 of the NREPA regulates the mining and reclamation of sand from the site under permit, it does not regulate the processing of other sands which is necessary to create a saleable product. The blending of sand from off-site sources is not a violation of the law or the permit. The processing of the additional sand brought in from off-site sources does not increase the demands for ground water. The wash operation at this site utilizes water totally contained within the boundaries of the mining site. The wash operation is not consumptive, the water is recirculated and remains on site.

2. "Should Cells 10 and 11 not be considered active.

Our on site inspection and our evaluation of the January 14, 1998 aerial photo does not indicate any activity within Cell Units 10 and 11. These cell units are not active.

Preserve the Dunes Response 2/18/98*

1. **Sand has been brought in from other mines for processing at Nadeau Pit.** We base this statement on a copy of a letter from John Crow attorney for TechniSand, Inc. to Harold Schuitmaker attorney for Covert Township, dated June 1,1995 in which he states "this is to advise that TechniSand, Inc. has its processing plant in Section 36, between Blue Star Memorial Highway and I-196, and for years has been hauling sand from other sites in Covert Township to that site for processing."

The permit process and the related documents for this sand dune mine never contemplated converting the site to a processing plant for sand brought in from other mines. No public hearings were held regarding such a change. These activities represent significant change in the impact of mining activity on neighboring properties, state roads, and persons living along the truck route to and from the site. Furthermore, it is against the zoning ordinance of Covert Township as was confirmed by Harold Schuitmaker in his written response to Mr. Crow.

In addition to the above concerns regarding Nadeau Pit, the permit application for the "Nadeau Site - Taube Road Extension" indicates that sand will be conveyed by truck to the Nadeau Pit for washing and processing. This would be a serious and significant change in the operations at the Nadeau Pit. Before such change in use is made, the EIS should be revised and public hearings held.

2. The reply was non-responsive. The cells are being used to move equipment fundamental to the mining operation. See the photo of road in the right hand column..

Russell Harding Letter 8/6/98

1. "We have been informed that sand has been brought in from other mines for washing ,(at the Nadeau Pit."

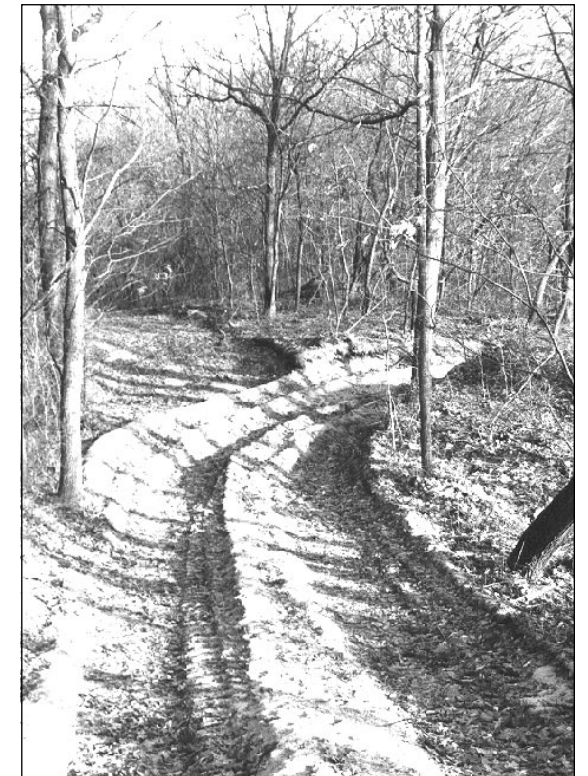
Response: The DEQ has investigated this issue and has not found any evidence that sand is or has actually been brought into this site from off-site sources. The DEQ contacted the company and they have confirmed that sand has never been brought into this site for blending purposes. The company stated it is impossible to conduct this type of activity at this site because they have no equipment to off-load the sand and then blend the sand with material processed through their dredge operation.

2. "Should cells 10 and 11 not be considered active

Response: Cell Units 10 and 11 should not be considered active because mining has not occurred in these cells. The movement of mining equipment along haul roads is a permissible activity and does not constitute activation of the cell unit.

Preserve the Dunes Response 8/20/98

1. Other than the letter from TechniSand's lawyer to the attorney for Covert Township, we have no knowledge of sand being brought to this site for processing. Nevertheless, simply dumping the sand next to the lake, pushing it into the lake with bulldozer and using the dredge to slurry the sand to the washing and grading area would allow easy unloading of sand.



Road in Cells 10 and 11 used for moving mining equipment.

2. We maintain that if **moving equipment across an inactive cell unit** does not place it in active status, **it is a violation of Special Condition 4 which prohibits moving equipment through inactive cells.** This was discussed and cited on page 2.

Preserve the Dunes, Inc. 12/18/97

3. Last year an additional entry has from the Blue Star Highway has been added north of the original one. This change in the use of the site has been made without revision to the cell unit mining and reclamation plan. This exposes more neighboring properties to noise, dust, disturbance and hazards of heavy truck traffic. This item was omitted in the December letter.
4. Item 3 in our original letter indicated that vehicles were being parked in Cell1, the only cell that has been reclaimed. This was an error. Actually, what we had thought were vehicles are abandoned pieces of mining equipment. I believe the violation is the same.

DEQ (Fitch,Whitener, Daniels) 2/10/98

3. "Additional entry from Blue Star Highway."

You are correct the company did not make a formal request to amend their permit by adding the second access road into the north end of the site. However, the company did request approval to re-open this access point in a letter dated, March 11, 1997 and on April 10, 1997 the DEQ did respond and provided approval for the use of this second haul road access. As this action was an improvement to a previously existing road, we did not regard this request to be significant enough to warrant a formal amendment to the permit.
4. "Abandoned pieces of mining equipment in Cell 1"

On inspections of the site no abandoned mining equipment has been observed in Cell Unit 1.

Preserve the Dunes Response 2/18/98*

3. The new entry has not been open since the first permit was issued in 1978. It was not just a reopening but a change in the use of the site and represents more than a minor change. It is further evidence of the lack of control and management that the DEQ exercises in the performance of its responsibilities to the people of Michigan.
4. Our inspection found the equipment pictured to the left within Cell Unit 1. These are very large and evident pieces of junk. An aerial photograph pinpoints the location.

A later aerial photograph taken in early April indicates that the equipment was relocated into the plant area and the adjacent portion of Cell Unit 1.

Russell Harding Letter 8/6/98

3. "Last year an additional entry from the Blue Star Highway has been added

Response: The DEQ confirmed this second access point to the site was an existing access road that had been utilized in prior years; it was not a new entry point created by the company. The DEQ did approve the use of this second access road into the site. The DEQ did not regard this approval as having a significant impact and did not require a formal amendment to the permit.
4. "... abandoned pieces of mining equipment [in Cell 1]."

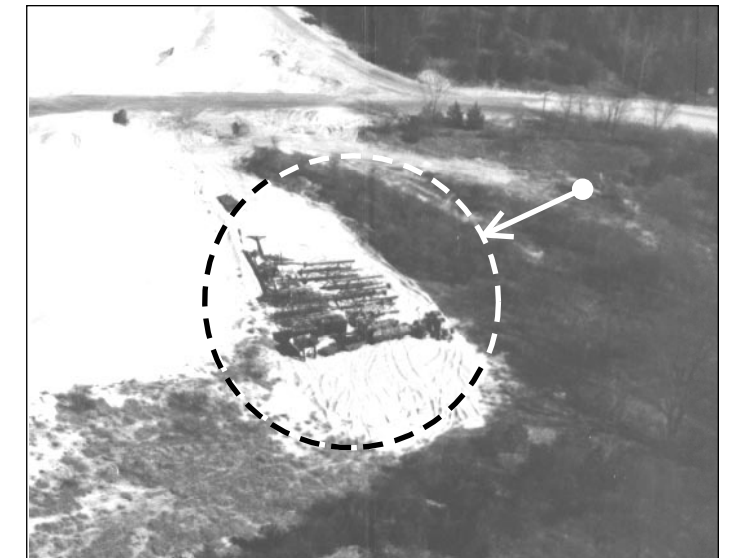
Response: As stated earlier, the DEQ agrees there was a minor boundary line violation between Cell Unit 1 and the plant site, and the mining equipment has been relocated to completely within the plant site area.

Preserve the Dunes Response 8/20/98

3. **The MDEQ was in violation of its own regulations and the conditions of the permit by permitting a haul road through an inactive cell.**
4. This response underestimates the extent of the violation that continued to exist through March of this year. Compare the two aerial photos below. They indicate the location of the equipment in mid-February, 1998 and in early April, 1998. This violation has now been eliminated.



Abandoned mining equipment in November 1997 located in Cell 1.



Abandoned mining equipment in April 1998 after being moved to the Plant Area with 20 foot transgression into Cell 1.

Preserve the Dunes, Inc. 12/18/97

1. The last amendment was issued to expand the mining operation onto adjacent land owned by Glover Dandridge. In applying for the amendment TechniSand made several misrepresentations, or at least misleading statements.

The application letter dated May 3, 1994 states "TechniSand, Inc. has recently secured an agreement with the landowners, and proprietors of the Blue Star Lounge, ..." The agreement is actually dated July 15, 1994.

They further state "The area to be amended includes 1.02 acres which is owned by Glover Dandridge and Adella Bracken of Covert, Michigan and 1.06 acres which is owned by TechniSand, Inc. The addition of this acreage to Cell 4 will increase the *active acreage* in Cell 4 from 7.16 acres to 9.24 acres." While the facts are generally true they misled the Division to state on the permit that the Cell was increased to 9.24 acres. In fact, the original permit indicated that the area of Cell 4 was 8.08 acres. The additional area from the adjacent property, assuming 50 foot buffer area is 2.12 acres as drawn (2.33 acres per the conditions of the purchase agreement). Therefore, **the area of Cell 4 is actually between 10.20 and 10.41 acres — exceeding the largest cell permitted by law.**

Without comment the amendment application letter states that there will be a 50 foot wide buffer around the perimeter of the pit. The buffer at the south end of the pit had been 100 feet. Section 63706 at the time of the permit amendment (September 15, 1994), required a 200 foot deep buffer area unless the Department determined that the sand mining activity was compatible with the adjacent existing land use. The property directly south of the expanded pit is zoned R-1, single family residence and clearly is not a compatible use. **No exception in the buffer width should have been made.**

DEQ (Fitch, Whitener, Daniels) 2/10/98

1. "The area of Cell 4 is actually between 10.20 and 10.41 acres - exceeding the largest cell permitted by law."

We believe you have misinterpreted the information provided by TechniSand in their May 3, 1994 letter requesting an amendment to the size of Cell Unit 4. The request by TechniSand indicated the area to be amended to Cell Unit 4 included 1.02 acres owned by Glover Dandridge and Adelia Bracken and 1.06 acres owned by TechniSand. The 1.06 acres owned by TechniSand is already included in the 8.08 acres identified as the current acreage for Cell Unit 4. Therefore, the revised acreage for Cell Unit 4 is now 9.10 acres (8.08 acres + 1.02 acres), which does not exceed the ten-acre limit provided by law.

The 200' buffer does not apply to this cell unit because the site was permitted and the cell unit was active prior to the 1994 amendments to the statute which added the 200' setback requirements.

Preserve the Dunes Response 2/18/98*

1. No we did not misunderstand. You failed to understand the game of semantics that TechniSand played.

They stated "The area to be amended includes 1.02 acres which is owned by Glover Dandridge and Adella Bracken of Covert, Michigan and 1.06 acres which is owned by TechniSand, Inc. The addition of this acreage to Cell 4 will increase the *active acreage* in Cell 4 from 7.16 acres to 9.24 acres." The statute does not govern the active area of a cell unit, but the total area. While the facts are generally true they misled the Division to state on the permit that the Cell was increased to 9.24 acres. The original permit indicated that the area of Cell 4 was 8.08 acres. The additional area from the adjacent property is not 1.02 acres. Including the 50 foot buffer the area is 2.12 acres as drawn on the revised PCUMRP or 2.33 acres based on the conditions stipulated in the sand purchase agreement. Therefore, **the area of Cell 4 is actually 10.41 acres — exceeding the largest cell permitted by law.**

The date of the permit was September 19, 1994. The amendments changing the setback requirements were made immediately effective on May 24, 1994 and the relevant DEQ regulations became effective June 24, 1994. Furthermore, TechniSand did not even have the right to mine the sand until its sand purchase agreement was executed on July 15, 1994, 22 days after the amended regulations became effective. **No exception in the buffer width should have been made.**

Furthermore, in the original permit the set backs were 100' except along the Blue Star Highway. This amendment reduced the setbacks to 50' without even notification to adjacent property owners.

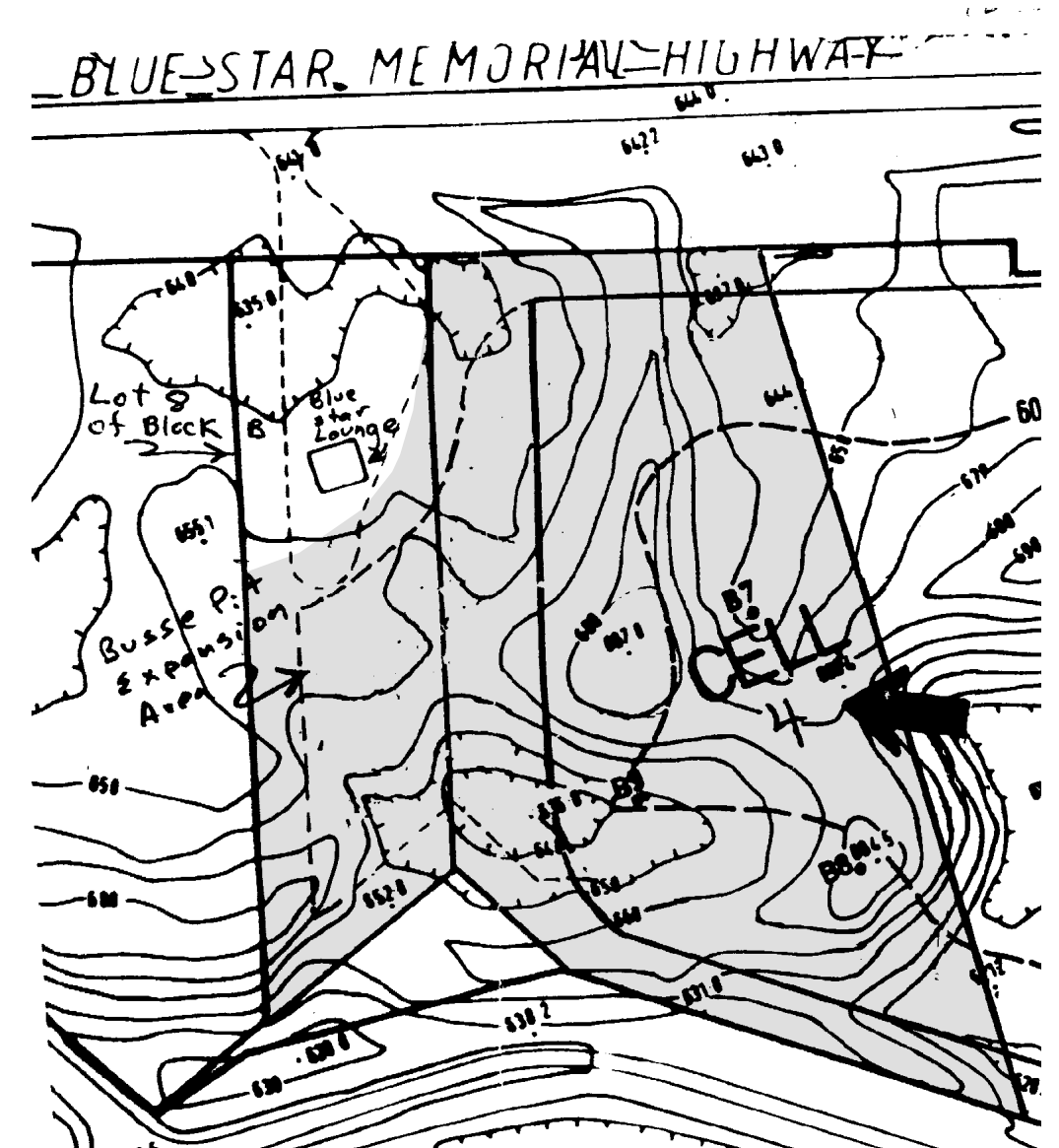
Russell Harding Letter 8/6/98

1. "... the area of Cell 4 is actually between 10.20 and 10.41 acres - exceeding the largest cell permitted by law. ... No exception in the buffer width should have been made.

Response: In order to obtain a third party determination of the acreage in Cell Unit 4, the DEQ sent the current mining plan to the Department of Natural Resources, Real Estate Division, who conducted their own calculations. The Real Estate Division determined that Cell Unit 4 is 9.8 acres in size.

Preserve the Dunes Response 8/20/98

1. We are not convinced. What was measured? How was it measured? We have digitized the area from a 1"=200' plan of the area attached to the Permit and furnished to us by the MDEQ under the FOIA. The area of Cell Unit 4 including a 50' buffer area as shown in the plan below is 453,833 square feet or 10.42 acres. If we use the area permitted by the mineral rights agreement, the area is 458,586 square feet or 10.52 acres. We continue to maintain that **the area of cell unit 4 was larger than the maximum permitted by law.**



Busse Property - Cell 4 Including Buffer Zone Scale 1" = 200'

Preserve the Dunes, Inc. 12/18/97

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2. **Reclamation has not been made in accordance with the 1986 amended Progressive Cell Unit Mining and Reclamation Plan.** Reclamation was to be a continual process. Top soil was to be removed and spread on to areas where mining had been completed. Trees were to be planted on the stabilized slopes.

2. "Reclamation has not been made in accordance with the 1986 amended Progressive Cell Unit Mining and Reclamation Plan."
Reclamation has been an ongoing process for many years. The company completed the last of the regrading in Cell Unit 4 in the fall of 1997 and should complete the remaining vegetative planting in the spring of 1998.

2. Our first concern is that the practices used in the Nadeau Pit will be followed here. Cell Unit 2 at Nadeau Pit was planted with grass years ago, placed in reclaimed status, conformance bonds were released, and still today trees and shrubs have not been planted.

The PCUMRP described a process of continual reclamation. As mining was complete in an area, it would be regraded and planted. We now have an entire cell that is raw sand. **Reclamation has not been made in accordance with the 1986 amended Progressive Cell Unit Mining and Reclamation Plan.**

In late March, Cell Unit 4 was hydroseeded without topsoil being spread over the raw sand. By mid-May an onsite inspection revealed that only 10% of the seed germinated.

The adjustment in the cell boundaries was made as an amendment to the original permit. Therefore, the requirement for a 50-foot buffer was applied. The requirement for a 200-foot buffer is only applicable to permits issued after July 23, 1994.

2. "Reclamation has not been made in accordance with the 1986 amended Progressive Cell Unit Mining and Reclamation Plan.

Response: The company has completed the sand dune mining at this site and did the final hydroseeding in Cell Unit 4 during the spring 1998 planting season. The DEQ has performed its initial inspection of the hydroseeding operation and will continue to inspect the site for compliance with the conditions of the permit and the provisions of the statute. We will assure that trees are properly planted after the grasses are established enough to provide adequate cover.

This dispute and the potential for error would be minimized if the MDEQ required survey coordinates for the corners of all cell units and any curve data necessary to fix location and size.

The 200' setback became effective for permits issued after July 23, 1994. This permit was issued (signed by Rodger Whitener) on September 15, 1994 and transmitted September 19, 1994. **By law and regulation, the 200 foot setback should have been required.**

2. It is unclear what the MDEQ expects from TechniSand regarding reclamation. The PCUMRP, as amended in 1986, called for 1)spreading of topsoil, 2)either a combination of hydroseeding and irrigation, or hand planted dune grasses, 3)if hydroseeding were used it would include seeds of indigenous shrubs and trees, and 4)a program of planting trees *on stabilized slopes*. It appears that no topsoil was spread, hydroseeding was used without irrigation, only grass was hydroseeded during the planting season last Spring. Given these failures to comply with the PCUMRP, we question what trees will be planted, how many, over what area and when. **The PCUMRP was not followed.**

The PCUMRP stated that the company will not wait until a cell is completely mined before beginning grading and subsequent hydroseeding. This was not done at cell unit 4. The entire cell was mined and left bare until last Spring. **Again the PCUMRP was not followed.**

Busse Property (Permit No. TS-BP-101-A4)

Preserve the Dunes, Inc. 12/18/97

3. The response to my Freedom of Information Act request indicates that **no up to date 15 year mining plan fulfilling the requirements of Section 63707 is on file.**

4. The site is not and has not been fenced.

5. According to the Van Buren Conservation District **a duplicate copy of the 15 year mining plan is not on file per 63707(2).**

DEQ (Fitch,Whitener, Daniels) 2/10/98

3. "No up to date 15 year mining plan fulfilling the requirements of Section 63707 is on file.

The 15 year mining plan which is required by Section 63707 of Part 637 of the NREPA is language from the original statute that was enacted by the legislature in 1976. The 15 year mining plan requirement is directed at a mining company and is intended to depict the companies plans for mining all of their properties. If a company only operates one mining site then the 15 year mining plan does only address one mining site. However, the reason for requiring the 15 year mining plan was so the DEQ will know what sites are being mined and what sites may be mined in the future, i.e. where applications for new permits may be requested. The law does not require any updating of a company's 15 year mining plan.

4. "The site has not been fenced."

Special permit condition No. 1 does state, "The permittee shall install and maintain fencing... in a manner restricting pedestrian access" We do not enforce this special permit condition as meaning the entire mining operation should be fenced. We require the operator to install sufficient fencing and signs to achieve the intent of the permit condition, which is to restrict pedestrian access. The permit condition is to achieve two purposes: one to provide for public safety and two to prevent disturbance of revegetated areas which have been reclaimed. The operator at this site has installed sufficient fencing and signs to deter pedestrian access to the site.

5. "A duplicate copy of the 15 year mining plan is not on file per 63707(2).

The 15 year mining plan for this site was prepared and submitted by the original Manley Brothers of Indiana in February 1978. A public hearing on the "Intent to Issue a Permit" was held on February 20, 1978 at the Berrien County Courthouse. It is the practice of the Department to make available all documents prepared by the applicants for a permit at several locations including the local area prior to the public hearing. The Notice of Public Hearing indicates that we did make the documents available at the County Clerk's office for VanBuren County from February 8, 1979 to March 9, 1979. We would

Preserve the Dunes Response 2/18/98*

3. See our comments above regarding the 15 year mining plan for Nadeau Pit. **No up to date 15 year mining plan fulfilling the requirements of Section 63707 is on file.**

4. During mining there was little to no fencing. Even though the danger to pedestrians has passed, it is still necessary to protect the reclaimed areas before they enter interim status. Fencing is needed. There is clear and obvious evidence of ORV's driving over the graded slopes on the site. The site was used for hunting earlier in the year. It is possible to walk or drive an ORV from the parking lot of the Blue Star Lounge right into Cell Unit 4. An on site inspection indicates that the fencing is anything but adequate to protect the reclamation efforts when they are made and to restrict pedestrian access.

5. No further comment, except that it is the responsibility of the sand dune mine operator, not the DEQ, to file with the Conservation District.

Russell Harding Letter 8/6/98

3. "... no up to date 15 year mining plan fulfilling the requirements of Section 63707 is on file.

Response: See response to No. 9 for the Nadeau Pit.

4. "The site ... has not been fenced.

Response: The recent ORV access to this site occurred along the south boundary of Cell Unit 4. The company has installed a temporary fence to preclude further access and has hired a private security company to make regular property inspections during non-work hours.

5. "... a duplicate copy of the 15 year mining plan is not on file per 63707(2).

Response: See response to No. 9 for the Nadeau Pit.

Preserve the Dunes Response 8/20/98

3. We are pleased that the MDEQ now agrees with us regarding the requirement of the law, paragraph 63707.

4. Fencing and signage is inadequate to restrict pedestrian and off road vehicle access. This violation has been partially corrected. Perhaps the security patrols in combination with the minor amount of added fencing may protect the site from damage to plantings due to recreational trespass. The effectiveness of the fencing will determine if it is adequate. We are pleased that the MDEQ has now required TechniSand to comply, at least in part, with the permit conditions in this instance.

5. We are pleased that the MDEQ now agrees with us regarding the requirement of the law, paragraph 63707(2).

Additional Questions

Preserve the Dunes, Inc. 12/18/97

DEQ (Fitch, Whitener, Daniels) 2/10/98

Preserve the Dunes Response 2/18/98*

Russell Harding Letter 8/6/98

Preserve the Dunes Response 8/20/98

In a letter to Russell Harding on July 18, 1998, Preserve the Dunes raised a number of follow up questions regarding the management of the Sand Dune Mining Statute by the Geological Survey Division, and several additional questions pertaining to the Nadeau Pit. The reply from Mr. Harding and PTD's response is included below.

1. "No conformance bond is required for the plant area. Why not?"

Response: The statute only provides for conformance bonds for the cell units in active and interim status. When the statute was originally enacted in 1976, the Legislature was fully aware that the plant site was not subject to bonding. The Legislature did not require bonding of the plant site because the plant site must be in active status for the entire life of the mining operation with no opportunity to perform reclamation until mining is complete.

2. "The DEQ requires that slopes be no steeper than 1:3 as required by amendments to the statute instead of 1:2 allowed when original permit was issued for the mine in 1978. Yet the DEQ does not require that setbacks be increased to 200 feet Why not?"

Response: The 1994 amendments to the statute established the 1.3 reclamation slope standard. The DEQ has required the 1:3 slope as a matter of policy since 1981 when the first draft of the proposed administrative rules were prepared. The 1994 amendments codified a standard which was being utilized by the DEQ and accepted by the industry as common practice. However, the increase to a 200-foot setback from the property line to the active mining area was an entirely new standard, which was not in effect prior to the amendment to the law. This increased setback was a significant change in the requirements of the law and is only applicable to permits issued after July 23, 1994.

1. Since conformance bonding is required to ensure that the operator complete the reclamation as set forth in the PCUMRP, it would be advisable to require a bond for the plant area, the last portion of the site to be available for reclamation. At this mine, the area is nearly 20 acres — the size of two cells. The law does not preclude the MDEQ requiring bond for the Plant Area. In this case the Plant Area was formed by successively reclassifying land from an Active Cell Unit to Plant Area. The MDEQ could simply have retained a portion of the bonding on the parts of the various reclassified cells. Furthermore, when the statute was originally enacted, no reference to "Plant Areas" was even made.

2. The logic of the response is unreasonable. *The amendment to the law was enacted by the legislature over four years ago. When cell boundaries are changed for the convenience of the operator, the MDEQ should and is well within its authority to require that the new configuration comply with the law.*

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3. "After the permit is issued, the reclamation requirements are continually reduced by agreement between the DEQ and the mine operator without public review and comment. Why is this allowed?"

Response: Reclamation requirements have not been reduced by agreements subsequent to issuance of permits. There have been some adjustments to the PCUMRP which require DEQ approval, but do not significantly change reclamation requirements, the scope of mining, or the overall intent of the PCUMRP. If a company requests an amendment which the DEQ determines will be significant or controversial, a public informational meeting and/or a public hearing is held before a decision is made.

3. **The MDEQ amends PCUMRP's without public hearings in violation of Special Condition 9** which states "The Department, upon written application from the permittee *and a public hearing*, may modify or permit variance from the progressive cell unit mining and reclamation plan or special permit conditions if such modification or variance is not contrary to the public interest and in accordance with the Administrative Procedures Act (Act No. 306, P.A. 1969, as amended)." The permit serves a number of purposes. It not only sets parameters upon which an operator can rely when planning its operation and running its mine, *the permit also establishes a set of conditions upon which the public may rely*. This condition does not state, as the MDEQ now does, that when the DEQ determines that "an amendment will be significant or controversial, a public informational meeting and/or a public hearing is held before a decision is made."

For example, the Plant Area added by amendment in March 1991 to be about 14 acres taken from Cell Units 1 and 2. In October 1992, the Plant Area was increased by adding an additional 2 acres from Cell Unit 2. In December 1992, another 3 acres were added — this time from Cell Unit 4 — bringing the size to over 19 acres. The mine had operated successfully for 13 years without a "Plant Area." This amendment was made without any public review or notification. We would even describe it as "significant" and "controversial."

Special Condition 9 requires a public hearing for any amendment to the PCUMRP. These have not been held.

Reclamation requirements have been reduced by agreements subsequent to issuance of original permits. Consider the following:

1978 PCUMRP states: "While the entire area from which the sand is to be removed in the next three years is approximately 30 acres,

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only a fraction of that area will be open at any one time thereby substantially reducing the visual impact of the sand removal process.” Yet, today we have 60-75 acres of bare sand on the site today over the Plant Area and 9 cells, in addition to a 20+ acre dredge lake.

1978 PCUMRP states: “Prior to the removal of sand, selected trees of transplantable type and size will be lifted by a tree transplanting machine and planted at a suitable nursery stock location on the site; the remaining overburden (topsoil, duff, brush, etc.) will be removed and stockpiled for use in the reclamation process. When the sand has been removed to the planned grade in a Unit, the overburden will be removed from the next Unit and the sand removal process will commence. Simultaneously, the overburden from that Unit will be placed on the proceeding (sic) Unit. The organic material contained in the overburden will be run through a ‘wood chipper’, mixed with the topsoil and placed and disked into the open sand.” Yet, *these practices were all abandoned.*

1978 PCUMRP states: “This layer of material ... will be planted with dune grass in accordance with USDA Soil Conservation Service recommended procedures for this area In those cases where transplanting existing trees with the transplanting machine is impractical because of steepness of slope, tree plantings of the type and spacing recommended in the above Guide will be made. The lands so treated will be ready for redevelopment at the completion of the project.” The Guide (USDA) recommendation was to plant dune grass in clumps of 2 or 3 plants on 18” centers each way; to plant between December and March, and space trees 6 x 8 feet in stabilized areas and 4 x 6 feet in non-stabilized areas. *Yet, Cell Unit 2 has only a few trees planted along its western edge, perhaps extending to 8-10 feet inside the disturbed area.*

1987 Amended PCUMRP: “Top soiling will place a layer some 2” to 6” deep upon restored slope profiles prior to revegetation. . . . Initial revegetation will take the form of hydroseeding

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or hand seeding the following grass species in either the spring or fall: Weeping Love, Lespedeza Kobe or Korean Variety, Lespedeza Sericea (scarified), Rye, Oats. Fertilization will be by the use of 15-15-15 fertilizer (800 lbs./acre) and lime to neutralize the inherent acidity of the soil (pH 5.5).

“Tree planting will be in the form of fast growing hybrid poplar, white and red pine, as well as oaks and cherry. . . . Dune grass will be used in those areas of high wind erosion or excessively dry soil conditions.” *Trees have been changed from large indigenous oaks, maples etc. to fast growing poplar and pine. The density of trees was omitted. We are aware of no fertilizing or soil treatment being used. Cell 2 was released from bonding requirements with only a few trees planted on the western edge of the cell. These are all reductions in requirements after the initial PCUMRP was initially accepted and subsequently amended.*

4. “. . . the DEQ has accepted a cell unit into interim status which does not fully comply with these [Section 63712(5)] requirements. Why?”

Response: Cell Unit 3 is the only cell unit at this site in interim status. When Cell Unit 3 was placed in interim status, all of the conditions for interim status were met. However, after the initial germination of the plant material, there were areas that did not survive the first full growing season. The DEQ notified the company of these areas of deficiency and they will be replanted during the next planting opportunity. This is not a unique situation. A company usually is required to replant portions of a cell unit once or twice before the vegetation meets the standard for release.

4. The response ignores the fact that mining activity was taking place in November 1997 as shown in our aerial photograph (page 4), and that at the time there were bare expanses of sand without any trace of prior plant material. We believe that Cell Unit 3 was placed in interim status so that TechniSand could begin mining Cell Unit 9, not because the condition of the Cell was in full compliance with interim status.

The remaining questions were answered in other responses above and simply referred the previous responses that are included above.